Stephen Billett

Vocational Education

Purposes, Traditions and Prospects

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This book is dedicated to Alison Lee Jackson
and Hannah Grace Billett

Preface

The aim of this book is to elaborate and discuss the project of vocational education. Although it takes many forms, and is perhaps the least unitary of educational sectors, vocational education is often the most long standing of institutionalised educational provisions, has long been central to generating the kinds of capacities that societies and communities need, contributed to individuals' development and had a range of distinct educational purposes that are not addressed in other educational sectors. In its more contemporary forms in many countries, it also has had, continues to have and has the greatest potential to engage the widest range of learners within its programs, institutions and experiences. Yet, because its manifestations are so shaped by particular institutional and historical developments across countries that attempting to crisply capture and characterise its forms, purposes and contributions becomes quite difficult. In some countries, it is a distinct sector of education quite separate from both schooling and university provisions. In others, the provision is founded largely within high schools, sometimes in specialised schools, and positioned as being a strand for those students who are not headed for university entrance. Then, there are those which see the occupational focus as being more or less central to this provision, and also those that are primarily concerned with the occupational preparation of school leavers and those which have a far broader and lifelong educational purpose, including sustaining individuals' employability across working lives. Moreover, the educational provision is quite often shared between experiences in educational institutions and workplaces. So, although the provisions of primary and secondary schooling, and also of university education have reasonably common characteristics and profiles, this is far less the case with vocational education. Indeed, because of the diversity of its form and purpose, it is often least distinguishable of the educational sectors within and across countries.

My motivations for writing this book are fivefold.

Firstly, there is currently no identifiable English language text that provides a comprehensive account of the project of vocational education: its purposes, processes, institutions and governance. In taking up this goal, it is noted that these were partially addressed almost four decades ago by Thompson (1973) in *Foundations of Vocational Education: Social and Philosophical Concepts*, yet here the scope intends to be even wider. Consistent with Thompson, this book provides a systematic analysis of the foundations of vocational education, to move beyond discussions

about current programs and to provide an analysis of the factors which shape this provision of education and also what brings about changes within it. Similarly, it recognises that society is changing and so the purposes and conceptions of vocational education are also changing. Given that this educational sector has diverse purposes, processes and institutions and forms of governance, which often reflect the host countries' particular histories, culture, and institutions that have shaped the need for and formation of vocational education, this might explain the lack of such a text. Certainly, there are accounts about the development of particular country's vocational education systems. Indeed, comprehensive accounts of vocational education from one country may have limited meaning or purchase in others, because of their distinct histories, institutions and needs. Nevertheless, there are elements of purposes, processes and institutions that have some commonality which permits the similarities and differences amongst provisions of vocational education to be understood from such a common conceptual platform. However, given the prominence of this education sector and the key social and economic roles it has served in the past, currently and doubtless will in the future, there is the need to identify both commonalities and difference across its manifestations, purposes and institutions and to recognise and celebrate both their similarities and differences.

Secondly, there is also growing and urgent need to address misconceptions, uninformed premises and flawed assumptions about vocational education that are often evident in its portrayal within the broader educational and public discourse. This has led to the sector being characterised in particular ways (i.e. pragmatic, reproductive and having low standing) which does little to serve its interests, or position it as an important and legitimate educational sector. Indeed, these portrayals have led to the sector being subject to pressures and criticisms that stand to render its provisions and outcomes as being inherently of low standing and worth in some countries. Yet, such portrayals ignore the important roles that, in its different forms, vocational education can and does play in the development of capacities that are salient to sustaining communities and societies' social and economic well-being. Often overlooked and certainly not exercised fully are the personal and social emancipatory roles that vocational education can and has the potential to play. It can assist in overcoming the limitations placed on individuals through circumstances of birth and/or earlier education experiences. It can also assist in enhancing the standing of occupations that are unfairly perceived to be of lowly standing, yet constitute a societal requirement. It can assist the material rewards and mobility of workers, particularly those not advantaged by circumstances of birth and productive and positive early educational experiences.

Thirdly, given the paucity of the informed conceptualisation, there is an urgent need to provide for frameworks, justifications that elaborate vocational education's purposes and elevate its standing as a vibrant and important sector of education. This elevation may assist the potential purposes, processes and practices of vocational education to become more accepted across governments, global agencies, funding agencies and within the education and academic community, and within places that employ workers and in the places where workers learn about occupational options and engage in learning those options. If there is one single issue which is of disservice to vocational education, it is its lowly standing in many countries.

Even in northern European countries where it holds comparatively high standing, it is seen as being inherently posterior to other forms of education, particularly that which is offered through universities. Yet, in other countries, vocational education is seen as being a lowly form of education best suited to those who are unable to be successful in its other forms. Some suggest that making a case for parity of vocational education with other sectors of education is an argument that has been long lost, and should not be revisited. Yet, it is an argument often lost from factors associated with its standing. Hence, if the parity argument cannot be made, it is important for vocational education to be seen in its own terms and on its own bases as being worthy and worthwhile. Ultimately, its standing will shape how support is directed towards this educational sector from government, industry, enterprises, parents, schools, guidance officers, funding bodies and the broader education and academic communities.

Fourthly, the organised institutional driven provision of vocational education is now expanding across the world in responses to social and economic developments in Asian, African and South American countries. Often, the expanding provision of vocational education is being driven by agencies and institutions that have as their primary goal concerns about national economic development. Yet, while these goals are commendable on their own terms they may overlook a broader set of concerns about how best the needs of individuals and communities can be realised through these provisions and in ways that are central to securing that development for both the shorter and longer term. Typically, the kinds of skills that governments and industry want to develop are also those that workers want to learn and with which they identify. So, there is a need to engage with communities and individuals to identify how these common goals can be realised. Moreover, often, models of and approaches to vocational education that have found success in some European countries are being recommended to and implemented in Asian and African countries regardless of the kinds and stage of development of institutional provisions, infrastructure and societal sentiments that are essential for such models to be successful. Consequently, there is a need to understand that because of the linkages and associations with other key institutions (e.g. workplaces), the specific former of the knowledge to be learnt (e.g. occupational knowledge) and its particular requirements for effective practice (e.g. particular work settings) that a more nuanced and informed account of vocational education purposes and processes need to be considered to meet particular national, occupational, community, workplace and individual needs. Indeed, a range of models of vocational education and considerations are required that can effectively address the diversity of purposes, processes and practices to effectively inform the effective development of vocational education across the globe. Such deliberations arise from an informed understanding of its particular purposes, likely processes and potential outcomes in meeting specific sets of needs at particular points in the history of the countries in which it is being enacted.

Finally, there is also a particularly personal imperative here. As someone who benefited from effective vocational education experiences in colleges and workplaces, and who practised a skilled vocation for many years, who has worked with in this field as a vocational educator, administrator, policy worker and now as a researcher, I maintain the sense that much of the provision of vocational education

is ordered by individuals whose understanding of skilled work and its development is incomplete. The kinds of curriculum frameworks and instructional practices I was asked to enact as a teacher always seemed inadequate. Moreover, the accounts of skilled work provided through competency statements misrepresented the nature of the skilled work I used to practice. Also, the emphasis by many researchers who write about work and learning come from perspectives that seemed to deny the perspective of and importance of the skilled vocational practitioner in the enactment of practice and its remaking. So, it seems that a corrective is required to go beyond vocations as a social practice and extend vocational education beyond emphases on societal, cultural and institutional factors to includes dimensions of the personal within its conceptions and considerations.

The aim here is to play a part in elevating the standing and status of vocational education as an important educational sector that makes significant contributions to the economic and social goals of the countries which engages them and also through the development of those individuals who participate in vocational education as practitioners and learners.

The orientation to the manuscript draws upon the concerns above: to emphasise further vocational education as a long-standing and legitimate sector which has its own particular set of purposes and processes, which sometimes overlaps with other sectors. The account here, however, is not merely descriptive and unquestioningly advocating for this provision of education. Central to the case being made is that the development and continuity of individuals' occupational competence and identity are central to their standing and well-being, the kinds of contributions they can make to their family, community, workplace and country's social and economic goals.

Whilst there is a progression across the book in terms of its contents and the adoption of particular views, each of the chapters is written as a stand-alone chapter with its own particular focus, structure and case. This approach is adopted to focus on the particular propositions that each chapter engages and elaborates, yet also makes links to other cases made in other chapters.

It should be acknowledged that the early work in preparing this manuscript was completed while on sabbatical from the Faculty of Education, Griffith University during the second half of 2007. During that period, I received support from the Institute of Education, University of London, and University of Regensburg. Thanks to John Donald for assembling an extensive collection of literature to consider and support this work at that time. However, there was considerable delay in advancing the manuscript as other and overwhelming priorities, came to the fore. This included establishing a journal *Vocations and Learning: Studies in Professional and Vocational Education*. Yet, this task has been useful for providing an opportunity to engage with a range of perspectives and issues that have strengthened the considerations exercised within this manuscript.

Reference

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Brisbane
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Stephen Billett

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Chapter 1
Vocational Education: A Field and Sector of Education

Vocational and technical education belonged to that side of life which the average free born Greek citizen regarded as 'banausic' and unworthy of his serious attention . . . .
(Lodge, 1947, p. 15)

The kind of vocational education in which I am interested is not one which will adapt workers to existing industrial regime; I'm not sufficiently in love with that regime for that. It seems to me that the business of all who would not be educational timeservers is to resist every move in this direction, and strive for a kind of vocational education which will first alter the existing industrial society, and ultimately transform it.
(Dewey, 1916, p. 42)

Vocational Education

This book aims to elaborate what comprises the project of vocational education (i.e. its purposes, processes and outcomes) and how this project should be conceptualised, enacted and evaluated. It seeks to realise this aim through appraising how vocational education is currently positioned and the bases by which it might best be understood and valued as a field of education. Yet, to consider the worth of vocational education, it is necessary to elaborate what constitutes vocations and occupations, as these are its key objects. Then, the origins and forms of vocational education sectors that now occupy a particular niche in many countries' educational systems are discussed. Therefore, having established what has come to constitute vocational education, its current purposes and the purposes to which it might aspire are able to be elaborated. Through a consideration of conceptions of curriculum, the dimensions of the curriculum processes that are used to enact these aspirations and the factors that shape their enactment, the worth and standing of vocational education are able to be appraised. It follows, therefore, that these foundational premises are necessary priorities in delineating, elaborating and appraising the project that comprises vocational education.

Hence, this book sets out and discusses these foundational premises for the field of vocational education: its project. In particular, it is anticipated that such

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discussions can inform decision making more fully at all levels about vocational education's form, purposes and how its provisions should be enacted. It is also anticipated that through such a process, the project comprising vocational education can be understood more fully and widely and in ways that more effectively serve its purposes. Through such considerations, vocational education might more adequately meet the needs and aspirations of those participating with it as students, work within it as educators and deliver more comprehensive benefits from its outcomes for the communities, enterprises and national economies that it serves.

An elaboration of the field of vocational education is a timely and necessary first step in this discussion. For although the field of vocational education ranges from the highest status programmes in universities (e.g. medicine) to the lowly esteemed programmes in schools, colleges and workplaces, it is perhaps most often seen simply as a sector of post-school or tertiary education, largely reserved for those with poor outcomes from schooling, and who are unable to secure access to higher forms of education. Indeed, despite all the interest in vocational education, much of it remains doggedly of low status and the professional, governmental and public discourses often do little to overcome this perception of its worth and standing. These discourses and long-standing societal sentiments, which are often based on uninformed premises, consistently underrate and undervalue not only the potential of the vocational education sector but also those who teach in its institutions and participate in its programmes. However, these sentiments are perhaps hardly surprising given how this education sector and its antecedents have been positioned historically and societally over a very long time. As a consequence, the sector has been prone to the demands of those decision makers who bring their own perspectives and also expectations, which are often unreasonable and difficult to fulfil. This circumstance may well extend across the broad field of vocational education, in which these sectors reside, and extend to higher education provisions.

It follows then that one ambition for this book is to contribute something of a corrective to this standing and these sentiments through an elaboration of the field of vocational education. This elaboration, however, requires an encompassing discussion about what constitutes its purposes, antecedents and processes. In particular, the case is made for vocational education to be considered on its own merits through a comprehensive elaboration of its characteristics, purposes and potentials. It is intended that these considerations and discussion will contribute to more informed decision making for and within this field of education.

A starting point right here is to draw a distinction between the broad field of education for occupations (i.e. vocational education) and that sector of post-school education that is commonly referred to as the vocational education sector. The former broadly embraces the provisions of education in universities, schools, workplaces as well as vocational education colleges and institutes where educational provisions for occupations are enacted. The latter is a subset of the former that exists as an important mass tertiary educational sector in many, but not all, countries. This sector's provisions are enacted in such institutions as Germany's *Berufsschulen*, the Further Education (FE) colleges in Britain and the Technical and Further Education (TAFE) institutes and colleges of Australia. In this way, the

vocational education sector and its institutions are seen as being an element, albeit a very central one, of the broad field of vocational education. Yet, this field also encompasses the occupational-specific programmes offered through universities, preparation for work life programmes in schools, as well as a myriad of provisions through other agencies and institutions. Indeed, the diversity of vocational education in terms of its purposes, institutions, students and forms not only sets it apart from other sectors but also makes it a field that is not always easy to define and characterise.

This first chapter sets out with an elaboration of what constitutes the project of vocational education. It commences by indicating something of the scope and diversity of the field and then providing some premises in the form of key concepts and conceptual premises through which this account progresses. Then, the case made throughout the remainder of the book is previewed through a description of each chapter's focuses and contributions.

Vocational Education: A Diverse Field of Education

Of the key educational fields, vocational education is probably the least homogeneous. Indeed, its diversity in terms of its purposes, institutions, participants and programmes stands as being one of its key and defining characteristics. Indeed, it serves a broad set of interests in quite distinct ways across a range of nation states. However, this very diversity makes difficult a unitary description or singular account. Moreover, as the factors that shape the purposes, forms, processes and manifestations of vocational education are evolving in distinct ways across different nation states, in response to social and economic imperatives, they are also far more dynamic and prone to transformation than fields such as primary, secondary and higher education. This diversity is also problematic because it is not often possible to readily transfer or apply concepts from one circumstance (i.e. nation state) to another. This is because their histories, institutions and imperatives, and even trajectories are distinct. In many countries, imperatives associated with the moves to or brought about by industrialisation and the formation of modern nation states have led to the establishment of vocational educational sectors. These inevitably exist as a tertiary level beyond schooling and sit alongside, but usually in a posterior position to university programmes. However, the formation of these sectors was far from uniform and coincided with different levels and points in societal transformation, as is elaborated in Chapter 4. Nevertheless, the vocational education sector is that which usually comprises the key non-university element of national tertiary education systems (i.e. post-schooling). In Australia, the sector comprises the Technical and Further Education (TAFE) institutes; in New Zealand and Singapore, the polytechnics; in Britain, the further education colleges; the higher vocational education schools in Finland (i.e. *ammattikorkeakoulu*), and in Germany, the *Fachschule*. Yet, even the most superficial of analyses indicate that these sectors are far from uniform and have quite distinct purposes, forms, institutions and alignments (Greinhart, 2005; Hanf, 2002; Moodie, 2002).

However, the important point here is that amongst the educational fields, vocational education sectors have the broadest range of institutions, and their formation, transformation and associations are the product of impetuses within their countries or even regional societal subsystems (Greinhart, 2005). For instance, the German *Fachschule*, have particular relationships with vocational schools of two kinds – *Berufsfachschule* which are full-time secondary vocational schools and *Berufsschulen* which are usually part-time schools attended by apprentices in the dual system. In some countries (e.g. Australia, Britain, New Zealand and Finland), the provision of vocational education is implemented through a distinct tertiary system, albeit in different ways. Yet, in other countries, vocational education provisions are seen as being an extension of the schooling system (Germany, Switzerland, Australia and Taiwan). However, in certain times and in some countries, the vocational education sector has been deliberately separated from other educational sectors on the grounds of it needing to be more aligned with the demands of industry needs than other educational sectors. It follows, therefore, that the evaluation of existing vocational education sectors, their reforms and comparisons with other such sectors need to take into account their geneses and structures; particular purposes, forms and relations with other elements of the educational sector; and relations with institutions within the community. The distinctiveness of these systems is found within the combination of cultural and functional contexts within society and the norms, attitudes and beliefs and ideals within societal and social subsystems which extend to the organisation of institutions (Greinhart, 2005), as proposed in Chapter 5. Hence, considerations of what constitutes 'best' practice and attempts to standardise and regulate uniformly need to be treated with great circumspection.

Therefore, the elaboration of vocational education here needs to be sensitive to how the diverse purposes for and range of educational provisions can be best understood on a national not global basis. However, beyond the societal needs, there is also a need to understand how vocational education meets the needs of its students. Yet, it is against this diversity that the effectiveness of the purposes, processes and outcomes of this field of education are most often evaluated. It is also from such a set of expectations that the distinctive qualities and characteristics of vocational education stand to be appraised by government and the community, and discussed within both the public and professional discourses. To elaborate all of these ideas, it is worthwhile briefly rehearsing some of the diversities that comprise the field of vocational education.

Diversities and Vocational Education

Vocational education has diverse purposes. However, perhaps the four purposes that are most central to its project are educational provisions focused on (i) the preparation for working life including informing individuals about their selection of an occupation; (ii) the initial preparation of individuals for working life, including developing the capacities to practise their selected occupations; (iii) the ongoing

development of individuals throughout their working life as the requirements for performance of work transform over time; and (iv) provisions of educational experiences supporting transitions from one occupation to another as individuals either elect or are forced to change occupations across their working lives. Hence, the educational concerns include finding ways of assisting individuals in identifying the occupation to which they are suited, the initial development of capacities required for that occupation, and then, the refinement of those capacities and their ongoing development throughout working lives and in ways to sustain employability. Included here are also imperatives associated with securing occupational specialisations and employment in other occupational fields, to say nothing of the range of learning, such as communication skills, problem solving, planning, being literate and numerate that are not occupationally specific, yet that are required for effective participation in work and working life (Lum, 2003), not to mention life outside work.

These diverse purposes are enacted through a diverse set of institutional arrangements. This includes the universities, colleges and schools referred to above, and also others such as workplaces, training centres and community education facilities. Moreover, there are often relations between or even amongst these institutions that can make the organisation, provision and integration of learning experiences demanding for both those providing the experiences and for learning through them. As noted, these vocational education provisions and the institutional arrangements supporting them are often quite distinct across nation states, and have led to distinct kinds of educational institutions, purposes, forms and provisions. Amongst these national distinctions are also different kinds of alignments with other fields and provisions of education. For instance, in some countries there is clear articulation between programmes within the vocational education and higher education sectors. In others, these articulations are either non-existent or difficult to negotiate. Hence, in contrast to the primary, secondary and higher sectors of education, there is no single global model that can be universally applicable to vocational education.

Moreover, students who participate in the vocational education sector as learners are also likely to be more diverse than students in schooling or higher education. This is because they comprise learners who are adolescents, young, middle-aged or older adults, who variously reside in urban and rural areas. Some of these students are concerned about securing an initial occupation and entering working life, others about developing their skills further or shifting from one occupation to another. Also, many, but far from all, of them have previously participated in a range of different kinds of educational programmes and experiences and have secured different levels of success. These learners are also at different stages in their careers and working lives (i.e. workforce entrants, novice practitioners, newly qualified practitioners and experienced practitioners). For instance, they can include women seeking to return to working life after being the principal care giver to children or ageing parents, young school leavers trying to find an occupation that meets their needs and then participants who have been recently retrenched from their job or are long-term unemployed. Moreover, these educational needs frequently extend well beyond occupational concepts and procedures. Whereas students in prestigious vocational

education courses such as medicine, law and commerce are likely to have high levels of educational achievements, many others are not so well positioned in terms of their needs and the provisions of educational support available to them. That is, their needs and those provided through educational systems are not always well aligned because of their readiness to engage in studies, their interests, the options available to them and their bases for participating in vocational education. Also, the content of courses is often determined by external bodies whose interests and emphases may or may not be consistent with those of the students (Billett & Hayes, 2000). Because of this complex of factors and characteristics, vocational education students represent potentially the most heterogeneous cohort of learners in terms of their interests, readiness, prior experiences and potential for engagements of any of the key educational sectors (i.e. primary, secondary and higher education).

These students also engage in a diverse range of courses whose scope is broader than that offered through other education sectors. These courses range from those with very specific purposes (e.g. skill development for licensed roles such as occupational and workplace safety, lifting, welding and machinery certification) to multi-year courses leading to high-level qualifications associated with paraprofessional occupations in the vocational education sector through to degree programmes in universities leading to prestigious occupations such as law, medicine or physiotherapy. Then, there is also a range of adult learning and development provisions. As well as ones associated with recreational pursuits, which, in some systems, comprise an element of vocational education under the guise of adult or continuing education; these can also include general education provisions aligned to assisting adults in securing entry into university. In these ways, the educational programmes that comprise vocational education lead to certification at a range of levels of educational achievement by a very diverse cohort of students. In many countries, these levels of certification are reflected in tiered qualification systems such as the National Qualifications Framework used in England and Wales, the Scottish Credit and Qualifications Framework, the Australian Qualifications Framework and the Qualifications Framework (DQR) soon to be finalised for Germany, which aim to articulate the range of these achievements and what they comprise.

Yet, curiously, despite the diversity of purposes, institutions and participants, this provision of education is now increasingly being organised and designed in ways that emphasise a singular approach aimed at meeting externally identified national occupational standards and the educational outcomes associated with them. National governments, regional governance (European Union) and global agencies (OECD) are all encouraging singular and more unified approaches to vocational education. Yet, such arrangements may well deny or fail to address the specific clusters of needs and expectations that arise in particular ways in each societal setting (e.g. country or region). However, such measures may well fail to account for the diversity of needs, purposes of and processes required by those who participate in vocational education. In making light of the diversity, such approaches only serve to ensure that vocational education is unlikely to realise its full potential as a sector of education. Also, key global agencies encourage developing countries to adopt models of vocational education that seem quite unsuited to their needs or institutions. For instance,

it seems that countries with developing economies in Africa and Asia are being prompted to adopt the dual system of apprenticeship by such agencies. Yet, these countries lack the kinds of institutions or infrastructure required to enact such a system. Both nationally and globally, this trend appears to be a product of states' and global agencies' interest in vocational education for economic purposes, with this interest being exercised through bureaucratic measures that seek to standardise and regulate the provision of vocational education (Kincheloe, 1995; Lum, 2003).

So, whilst seeking to identify what is distinctive about vocational education as a field of education, in terms of its project of assisting individuals in engaging in working life through their selected occupation, and to be personally and institutionally effective within and across their working lives, there is no attempt here to offer a unitary conception that has a single and uncontested set of purposes and practices. Instead, the principal concern here is to identify, discuss and elaborate the distinctive purposes, scope and diverse forms and characteristics of vocational education to understand and value its particular contributions to individuals' development, their communities and societies. That is, the intent is to investigate how the diverse personal and social purposes of vocational education might be most effectively understood and realised.

Yet, despite all of this diversity there is much which is common and coherent about vocational education regardless of the institutions which host its provisions, the scope and focus of these provisions, and the kinds of students that are engaging with it. Having outlined something of the diversity of this field, it is now important to identify some principal means by which its coherence can also be illustrated and explained.

Vocational Education: Key Concepts and Conceptual Bases

To provide coherence in the approach adopted and consistency with ideas across the chapters that follow, the key premises underpin the discussions across the following chapters are set out below.

Vocational Education: Both a Field of Education and a Sector

Within this text, vocational education is held to comprise a broad field of education. This field includes, as a sub-element, a specific sector of post-schooling education also commonly referred to as vocational education that usually has a particular set of country-specific institutions and alignments. Despite the field of vocational education being far broader and more encompassing, it is often this sector that has come to characterise vocational education when it is discussed in the public, government and even educational discourses. Yet, it comprises a broad field of education that includes all those programmes and provisions that have intents associated with developing capacities for specific occupations or working lives. For instance,

the educational provisions for medicine, law, commerce and physiotherapy offered through universities and pre-vocational programmes in high schools are both components of the broader field of vocational education, as well as those offered by the vocational education sector. So, there are more commonalities across this field than are usually expressed in the public and scientific literature, which tends to see these provisions as being two distinct and separate sectors, rather than there being a distinct field of vocational education endeavour. In essence, they have the same educational project.

The overall commonalities across these range of offerings from universities, vocational colleges and schools is sometimes seen more easily from an external perspective than from within the field of education (Crouch, Finegold, & Sako, 1999). That is, regardless of institutional context, these provisions are associated with developing and sustaining the capacities required for working life. Their educational purposes are primarily concerned with identifying the knowledge required for effective performance in an occupation, organising experiences to capture that knowledge and then finding ways of enacting those experiences so that learners can come to be effective in the occupational practices. This is the case, regardless of whether students are learning about medicine, law, hairdressing, tourism, cooking or safe work practices. Moreover, all of these intended learning outcomes can be captured within a coherent set of educational goals associated with developing the procedural, conceptual and dispositional attributes required for those practices. Therefore, despite all of the diversity and seeming distinctions amongst institutions offering vocational education, not the least being their societal standing, there is much that is common to the provision of vocational education and that makes it coherent as a field of education. This commonality extends to the kinds of educational intentions to be realised (i.e. development of occupational-specific knowledge), the need to engage with external partners (i.e. provide experiences across educational and practice settings) and the need to identify occupational requirements, curriculum provisions and assessment processes. The differences are likely to be discipline specific to some degree and also to relate to particular levels and kinds of expectations, but ultimately these are merely variations on a common set of concerns across the entire field: the development of occupational knowledge.

Certainly, the provision of vocational education through universities has long existed, and has always been largely directed towards occupational purposes, despite the contrary often being claimed. However, over time, the need for the vocational education focus to intensify and emphasis to increase has a result of changes to key economic and social factors. These factors include the growth and spawning of professional occupations in the industrial and post-industrial eras and the need for educational provisions to meet both the occupational needs and growing aspirations of a burgeoning middle class. Similarly, the formation of this vocational education sector largely arose in Europe during the era of economic and social revolutions. This era saw the industrialisation of much economic activity, the virtual destruction of family-based small businesses that had been the key source of work and employment and occupational preparation. It also saw the end of feudalism and the overturning of its institutions and practices. All of which when combined with

the development of modern states and their interest in mass education for political, societal and economic goals. This interest extended to vocational education. At this time, vocational education sectors were established in many countries because of imperatives associated with securing an adequate supply of skilled workers for national workforces, educating young people to make them gainfully employed (and to avoid idleness, crime and social disorder), and to engage them within civil society. Indeed, the development and forms of this educational sector differed markedly from what had been previously been a European-wide uniform process of occupational preparation through apprenticeship and journeymanship (Hanf, 2002), usually within small and family-based businesses. Yet, the range of social factors present, which needed to be addressed in each of these countries, caused approaches to be adopted in each nation state, leading to particular forms of vocational education as discussed in Chapter 5. Consequently, although seemingly diverse or different by degree and being exercised through quite distinct institutional arrangements, their purposes and practices are quite consonant. Hence, this book has as its overall focus a broad provision of vocational education as a field of education. Yet, it has a particular focus on the educational sector referred to as vocational education; because, in many ways, this is the central element of the field and also the most contested of the educational sectors and this contestation has done much to shape vocational education per se.

Vocations and Occupations as Concepts

It is also important to clarify how the two key terms of vocations and occupations are used in the discussions within this text, as these are the key objects of vocational education. In particular, as the word vocation is used in quite different ways and for different purposes an early clarification of its usage here is warranted. Commonly, the word ‘vocation’ is seen to have two meanings: (i) an occupation or paid employment and (ii) the activity or pursuit to which an individual is ‘called’ and engages in intentionally. Here, it is proposed that the concept of an occupation is used to address the first of these two meanings and the concept of vocation, the second. As elaborated in Chapter 4, occupations are held to largely arise from social facts (i.e. societal needs that have evolved through history, culture, society and situation) and are manifested in a series of goals and practices which are sustained and advanced because they are important to societal needs and cultural practice. Consequently, their genesis and transformations are found in the social world. However, despite often being shaped through participation in occupational activities, individuals’ vocations are essentially a product of personal need, intentionality and desire. Vocations as personal facts are seen as being something that individuals need to assent to and engage with as elaborated in Chapter 3. It follows then that the position adopted in this text is that vocations refer to the activities or pursuits to which individuals assent and are more personal in genesis, whereas occupations are classifications of forms of work that are the products and the imperatives of society (i.e. institutional facts).

From working through these key concepts, it becomes immediately apparent that these phenomena and others addressed in elaborating what constitutes the project of vocational education require relevant and helpful explanatory concepts. Hence, it is necessary to set out something of the conceptual premises used to advance an informed account of the project of vocational education in this book.

Constructivism: Personal and Social Perspectives

In consideration of learning, curriculum and educational purposes, the overall theoretical paradigm in which ideas are advanced within this book might be described as broadly constructivist, in both its personal and social forms. Constructivism holds that individuals actively construct meaning through their judgements and decision making as they construe what their experience and construct knowledge from it. They do so in the knowledge they have and develop through such processes. Indeed, some hold that this active, reflective and critical constructive process is an essential, distinguishing and defining quality of humans (e.g. Taylor, 1985). That is, the capacity for conscious and, importantly, reflective processes of engaging with, learning from and, importantly, being reflective about what we have learnt and experienced sets us apart as a species. Rather than merely reacting to what we experience, we have the capacity to be considered in doing so on the basis of what we know and how we come to know (i.e. human reflexivity). Hence, humans are able to understand what is experienced, but at the same time can be selective in how we engage with what is encountered. Piaget (1968) who, as a genetic epistemologist, was interested in the process of experiencing advanced the idea of humans seeking equilibrium with what they experience. That is, we try to actively make sense of what we encounter and also attempt to resolve disequilibrium – experiences or elements of experiences which do not make sense to us. He suggested that disequilibrium was held to comprise an unsatisfactory cognitive experience that had to be resolved. In other words, humans are active meaning makers rather than mere passive receptors of knowledge: we engage with the world beyond us in an active and importantly selective way (Baldwin, 1898; Kelly, 1955). More recently, this process has been described as individuals seeking viability in what they encounter by radical constructivists such as Van Lehn (1989) and von Glasersfeld (1987). The concepts here are much the same: that is, humans seek to actively engage with and make sense of what they encounter. This account of active, critical and, sometimes, reflective construction is widely embraced now. For instance, the concept of gaze is used in feminist post-structural theorising to explain that as well as women having a particular gaze through which they make sense of the world beyond them, they are also conscious of how the world gazes at them (Davies, 2000). This conception emphasises the active, the reflexive and the negotiated process of human cognition.

Accounts such as Piaget's (1971), Kelly's (1955) and those of the radical constructivists Van Lehn (1989) and von Glasersfeld (1987) can be described as individual constructivism. This perspective tends to strongly emphasise the role and contribution of individual cognition in the construction of knowledge. However,

as is evident in (Davies, 2000) account of gaze, beyond the individual other contributions and suggestions from the social world shape what we experience and, therefore, what we construe and construct from that experience (i.e. learn). Hence, by degree, the social world plays a strong part in shaping and suggesting what we experience. Thus, it is important to consider how the social world contributes to those experiences. Not the least of these contributions is what the social world provides for individuals and suggests in the forms of norms, practices and goals. Also, as human learning arises through what we experience, there are social contributions to our learning and knowing, because so much of that experience arises from institutional facts (Berger & Luckman, 1966; Searle, 1995). Hence, it is important to account for the social contributions to our thinking and acting. Consequently, the contributions of social constructivism, such as in socio-cultural theory, activity theory and cultural psychology make important explanatory contributions. These perspectives seem very apt to explain the purposes and practices of vocational education because the knowledge needed to be learnt for performance in occupations arises through history and culture, and is shaped societally and situationally.

There is also another world which needs to be considered in terms of its suggestions and contributions, that of the brute world: nature. The brute world shapes much of human activity in terms of the need to have sustenance, shelter, warmth, good health, and have sexual and other desires fulfilled. Moreover, the process of maturity, for instance, mediates our cognitive processes, capacities and what is possible and reasonable for humans to achieve at different points in their life. In this way, together, the world beyond the individual in the form of brute and social facts represents contributions from beyond the skin that provide and mediate human experience and learning. Yet, rather than there being either determinism on the part of the individual, the social or the brute world, the active process of meaning making suggests that the relationship between the person and the social and brute worlds is one which is mediated by degree by personal premises, even if it cannot be wished away. Central to those negotiations are degrees by which the brute and the social world is able to project its suggestions, on the one hand, and the degree by which individuals elect to engage with what they experience, on the other. These paradigms of human engagement and learning provide explanatory bases for understanding the project of vocational education here. For instance, there is acknowledgement of individuals' learning through a process of making sense within sets of experiences that are shaped by the social world, which includes sets of norms, values, practices and procedures developed over time and are manifested in occupations, tools, artefacts, goals, norms and also values. The process of individual negotiation to secure viability and ways forward are shaped by personal goals, energies and practices. It is through this negotiation and enactment that culturally derived activities such as paid occupations will be constantly remade and sometimes transformed. However, supporting the kind and extent of such an explanation necessitates engaging a range of theoretical perspectives that together can elaborate and illuminate vocational aspects of education.

The cognitive literature makes a number of important contributions to deliberations about what constitutes vocational practices and how their learning proceeds.

The discipline of cognitive psychology largely informs this view. This discipline is often seen as representing individual constructivism yet also offers salient explanatory accounts for considerations of vocational education. These include what constitutes expert performance within a domain of activity that constitutes effective performance in an occupation. So, beyond informing about the processes that underpin skilled performance, this literature is particularly helpful for understanding and elaborating the goals (i.e. aims, goals and objectives) that vocational education is directed towards. Arising from studies of expert–novice differences, a set of characteristics has been identified through four decades of research within cognitive psychology (Charness, 1989; Ericsson & Lehmann, 1996; Larkin, McDermott, Simon, & Simon, 1980). These characteristics include the extent and organisation of knowledge that arises through experiences occurring over time and of different kinds that develops and permits the effective deployment of an extensive domain-specific knowledge base. This basis or domain of knowledge comprises richly associated conceptual knowledge and repertoires of procedures that have been developed and honed over time through engagement in activities, incremental improvements towards mature performance and the capacity to monitor performance during the enactment of tasks.

The cognitive literature has been rightly criticised for representing a conception of performance based upon individuals' capacities to secure and manipulate knowledge (Greeno, 1997). In doing so, it has under-played the social contribution and social context of competent performance. Nevertheless, it offers important premises for understanding the kinds of qualities that constitute expert performance in individuals and the development of these qualities. Importantly, a key contribution is the richness and diversity of experiences, the opportunities to engage in experiences, on the one hand, and how individuals elect to engage in those experiences, on the other hand, that is central to the development of expertise. Taking this second point, in reflecting on three decades of his inquiries into human performance, Ericsson (2006) identifies the kind and quality of experiences and individuals' deliberate practice as being central to the development of high levels of human performance. Hence, beyond the provision of experiences, how learners engage with what they experience is also significant. So, although individuals may have greater or lesser capacity to perform effectively, it is the range of experiences and combination of both new and familiar experiences that develop rich conceptual knowledge and well-honed specific and strategic procedures within a particular domain of human activity as well as their effortful engagement that is central to the development of the capacities required for effective occupational performance. From this literature, it is necessary to engage with ideas that explain the contributions and positioning of the social world to capture concepts of domains as existing at personal, situational, cultural levels and for expertise to be tightly associated with particular circumstances.

Moreover, the cognitive literature also provides an account of the kinds of knowledge that are exercised and developed within activities such as paid work that helps in understanding the kinds of knowledge to be learnt through vocational education. They comprise the conceptual, procedural and dispositional components of occupational knowledge which are richly interrelated in representing the attributes required

for the performance of work tasks and roles. Conceptual knowledge comprises facts, propositions, concepts and assertions (Anderson, 1993) referred to as declarative knowledge – because it can be stated – or knowledge ‘that’. This form of knowledge comprises a range of levels from simple factual knowledge that can be recited, through to rich conceptual understanding, which includes accounting for a range of complex variables, and is usually characterised in terms of depth by the range of contingent elements. Procedural knowledge or knowledge ‘how’ is that which we use to do things whether in thinking about or carrying out physical acts (Anderson, 1982). Again, there are different orders of procedural knowledge. At one end there are highly specific procedures which once practised until they become proceduralised do not require much conscious thought to enact (Stevenson, 1991). At the other, there are strategic procedures that encompass a range of factors, and demand conscious and considered attention, as well as access to a range of concepts, propositions and strategies. Finally, dispositions comprise attitudes, values and beliefs that shape, motivate and direct energy when conceptualising or practising (Perkins, Jay, & Tishman, 1993a).

Importantly, as is elaborated in Chapter 6, these three forms of knowledge are interrelated; they are not wholly discreet or separable. You cannot conceptualise something without engaging procedures and the degree by which you direct energy towards the task of conceptualising or deploying knowledge is a central determinant in how it is used. Here, they are presented separately in order to discuss and elaborate their qualities. Yet, noteworthy is that misconceptions of and capacities to perform are also associated with individuals’ interests and values. So, there is interdependence among these three forms of knowledge. These are some of cognitive psychology’s contributions to understanding the enactment of occupational practices, the goals for learning within vocational education and the processes by which after learning might occur.

The social perspective of constructivism is largely represented by socio-cultural theory and cultural psychology. These two views provide accounts of how the social and cultural world shapes the occupational knowledge individuals need to learn to exercise their vocations, as well as the means by which this learning occurs. Sociocultural theory has much of its origins within historicism and reflects the view that historically, culturally and situationally defined activities shape individuals’ cognition. This shaping includes ways that historically, culturally and situationally shaped activities and artefacts stand as means by which the social world exercises its suggestion. This view is particularly helpful in understanding how the kind of knowledge required in occupations has evolved through history, in response to changing cultural requirements and is manifested in particular ways in specific workplaces (Billett, 2001b). The practice of communities (Gherardi, 2009) that constitute workplace norms and activities can be illuminated through these theories. Equally, this approach offers a way of understanding how learning and development arises through engagement in socially derived activities and artefacts. All of this suggests that the process of social constructivism can best be described as being inter-psychological: between the individual and social, which leads to intrapsychological outcomes (i.e. within the individual) (Vygotsky, 1978). That is, there

is a traceable legacy in terms of human change or learning arising through engaging in socially derived activities. However, critics of social constructivism suggest that from this view, the inter-psychological processes and intra-psychological outcomes are overly privileged. For instance, in accounts such as Engestrom's (1993) activity system it is difficult to identify where human subjectivity and other contributions of the individual play a role in learning and development, and the exercise of socially derived activities. However, within cultural psychology, there is more acknowledgement of the role of the individual when engaging with the social world. Valsiner (2000) refers to the uniqueness of each human experience and suggests that individuals have to rebuff much of the suggestion and demands of the social world in order to maintain their sense of being or equilibrium. Indeed, it might be that much of socio-cultural theory in seeking to redress earlier cognitive perspectives which emphasised the cleverness of the individual, have over-compensated and have now come to unquestioningly privilege the social world. In doing so, such theories risk becoming a new form of behaviourism. Certainly, here it is important to be reminded of Miller and Goodnow's (1995) concern to avoid the twin perils of either individual or social determinism.

Indeed, a number of accounts from sociology openly provide space for explaining individuals' engagement and mediation with experiences provided by the social world. So, from a theoretical perspective which focuses on and privileges the collective, there is an acceptance of individuals negotiating with social systems, rather than socialisation occurring. For instance, in Giddens' (1984) concept of structuration there is an important role for individuals in negotiating and advancing the social world. Also, in Berger and Luckman's (1966) account of the social construction of knowledge, there is acknowledgement that the social world is unable to extend its message uniformly and with confident potency. Instead, the projection of social press can be partial, as are individuals' taking up of it. Sociological accounts are also helpful for informing considerations of the social conditions and impediments that influence the practices and conceptions as well as the institutions. Here, the way in which society is reproduced and its rewards distributed can be premised upon social mores and values, as much as objective accounts or what constitutes social worth.

Philosophy similarly provides important insights into the goals for vocational education and conceptual tools for gauging the worth of particular initiatives, purposes and institutional interests (Elias, 1995; Frankena, 1976; Lum, 2003). It is these tools that are sometimes most helpful in deflecting unhelpful rhetoric and assumptions that arise through the social world about the kinds of values that are associated with vocational education. Also, and more than incidentally, early philosophic accounts also provide insights into the value systems that arose in Hellenic Greece about the delineation of different kinds of work and the capacity of privileged elites to comment dispassionately on what other people do, which has ultimately been a great disservice to the standing and status of vocational education (Steinberg, 1995). Accounts from anthropology are also useful for making two significant contributions to an understanding of vocational education. Firstly, they provide accounts of occupational practice and its particular requirements in particular cultural settings at particular times. They also inform how crucial knowledge and skills that

are essential to the survival and continuity of communities are learnt through practice and over time. This contribution has been particularly helpful in understanding and legitimating the learning of vocational practice that occurs outside educational institutions, in workplaces, for instance.

Historical accounts are helpful in understanding the development of what constituted and now constitutes vocational education. Accounts are available from ancient Greece (Lodge, 1947), the builders of the great cathedrals of Europe (Gimpel, 1961) through to recent accounts about the decline of guilds (Hanf, 2002) and the formation of vocational education systems in Europe and elsewhere (Gonon, 2009b; Greinhart, 2005). These studies are helpful in understanding the purposes and premises of vocational education systems as a discrete sector of education and the development of the institutions that provide experiences, certify learning and make judgements about the suitability of programmes of learning.

Finally, there are policy studies that often draw upon sociological concepts in describing, critiquing and advancing policy-related issues and procedural mechanisms within the vocational education. These are particularly helpful in extending the kinds of analysis which has long been exercised within studies of curriculum to a broad array of issues that influence the purposes, practices and institutions of vocational education. In all, and not surprisingly, it has been necessary to draw upon an extensive body of literature to elaborate the project of vocational education and explain its particular worth, legitimacy and contributions as a discrete field of education. This is necessary because much of what is proposed for vocational education arises from societal prejudice and sentiments, rather than informed considerations.

Organisation and Contributions of the Chapters

The case made in this book is organised through a series of chapters, each of which has a core concept as its focus and discusses that concept. Quite deliberately, each of these chapters is intended as a stand-alone section that does not rely upon either the preceding or following chapters. If there is a narrative across these sections, it is in its focus on a common project. However, there is a clear attempt to be consistent in the case made within and across each section. There are also themes that emerge in a number of the chapters that are rehearsed and developed over the book's sections. However, references made within each of the chapters address related concepts and issues. It is assumed that the readership will be less interested in reading the book from cover to cover, than with engaging with particular sections of the text, or even topics within and across sections. Therefore, although there is consistency across the book in terms of the overall case made and a progression of chapters based upon the overall task of elaborating the project of vocational education, the chapters can be engaged with on an individual basis. This process can lead to some repetition and apparent redundancy across the text, which has been minimised as much as possible, yet exists in ways which are intended to make each chapter readable and sustainable in its own right.

To foreshadow how the purposes, scope and focuses of elaborating the concept of vocational education occur across this text, a brief overview of each of the contributing chapters now follows.

Chapter 2, *Positioning Vocational Education,* sets out the case for considering vocational education as a field and sector of education. It does this through identifying some of its key characteristics including its scope and distinctiveness as a field of education. This discussion includes discussing the diversity of its focuses, purposes, practices, forms and intended outcomes that have been foreshadowed above and extends to a consideration of the institutions that shaped and are engaged in the enactment of its provisions. The divergent standing of the field is explicitly referred to here. Following this, a series of propositions are advanced to more adequately position the vocational education field and its worth, and how it is to be advanced and discussed. These include the proposition that all education is ultimately vocational in so far as it addresses the needs of those who participate within it; and of necessity, such a discussion about how the worth of vocational education should be considered in terms of either the participants' (i.e. students) or others' concerns (e.g. those of government and employers). In all, the chapter proposes that vocational education is as legitimate as any other educational sector because its purposes and scope are distinct and not subordinate to those of other sectors. It also suggests that there is little difference between the purposes and processes of much of what is called higher education (i.e. that which occurs in universities) and what is intended, enacted and experienced in vocational education settings (i.e. vocational colleges). Moreover, the kind of capacities required for effective occupational practice draw upon both occupationally specific and other kinds of knowledge. That is, both occupational-specific and more general purposes are intermingled within effective provision of vocational education. However, because of a history of low status and subordination to other powerful institutions, including schooling and higher education, it is the voices of powerful 'others' rather than those who practise an occupation that have long been used to characterise, make judgements about and attempt to reshape the provision of vocational education.

Chapters 3 and 4 together discuss, elaborate, position and define the concepts of vocations and occupations as the key objects of vocational education. These chapters propose that although there are social and personal dimensions to both vocations and occupations, the personal imperatives are stronger in the former and social imperatives in the latter. This distinction has implications for both the purposes and processes of vocational education. The purposes that vocational education needs to take account of reflect the scope of the personal and social factors that are privileged in each of these conceptions. In discussing the concept of occupations, and their social geneses, it is proposed that the voice of vocational practitioners has frequently been denied in the privileging and presentation of what constitutes the work they do, its worth and complexity, and the kinds and provisions of education that serve the occupations. Instead, it has been the voice of societally and socially privileged others who have advanced claims about the worth and standing of different kinds of occupations that are addressed within vocational education provisions. Moreover, these claims extend to propositions about the inherent limits of those

who practise these occupations. These voices continue to shape the societal focus and effort upon the development of these occupations, not the least distorting its purpose and positioning, for instance, proposing that vocational education as being narrow and reproductive.

Chapter 3, *Vocations,* delineates and elaborates what constitutes a vocation. It proposes that vocations in the form of occupation have both social and personal dimensions. That is, the sources, forms and standing are shaped by social contributions. However, they have meaning and purposes for individuals that cannot be wholly accounted for through utilising social or brute bases alone. Therefore, it is proposed that a vocation is largely shaped by personal factors that include negotiations with the social and brute world. In particular, vocations are held to be something individuals need to assent to and cannot be mandated by others. Moreover, it is this negotiation between the personal and social that is essential to the enactment of vocations as occupations, their remaking and transformation, and important roles of overcoming social and personal disadvantage. Hence, vocations are held to be primarily, but not wholly, a personal fact, albeit mediated by institutional and brute facts. In contrast, occupations are held to be primarily institutional facts. Consequently, the fourth chapter, *Occupations,* describes the development of the concept of occupation and both its social and personal dimensions. In particular, it notes how the voices of powerful elites have shaped the standing of occupations, including those which are the focus of much of vocational education. Indeed, whereas aristocrats, theocrats and social reformers have shaped the standing of occupations, in more recent times bureaucrats, liberal educators, industry spokespersons and researchers have done much to shape the standing of vocational education, often in ways that are unhelpful.

Chapter 5, *The Formation of Vocational Education Systems*, discusses the circumstances and imperative that led to the formation of what is known in many countries as their vocational education system. Commencing with a consideration of modernism and the key transformations brought about by the end of feudalism, the industrial revolutions and the movement towards modern nation states, the development and formation of diverse vocational education sectors and provisions across a range of European countries is discussed. This discussion highlights the ways in which the formation of the sectors, typically, were responses to the growing need to organise and secure the appropriate amount and kinds of skilled workers with the collapse of family-based provisions of skill development, through apprenticeship and journeymanship. It also discusses how the formation of these systems and their methods of operation are subject to criticisms from those who favour more general (or liberal) provisions of education rather than those that are specific to a particular occupation and that such criticism continues to this day. Moreover, beyond this enduring and often unhelpful critique is the emergence of a new and powerful voice which shapes the provision of vocational education in contemporary times: that of the bureaucracy and those that they co-opt to advise about what should constitute the purposes, goals and practices of vocational education. It is argued that, consistent with previous experience, it is those from outside the educational sector that are invited to make decisions about the nature of the provision, its purposes,

processes and intended outcomes. Actual practitioners, those who teach in these programmes and the students who participate in them, are rarely given a voice in the decision making. Yet, those nominated to speak on behalf of vocational education are not always adequately informed and represent other socially privileged voices that bring particular perspectives to the decision making. Such processes seemed to be becoming more common and intense and are having a powerful impact upon what constitutes vocational education, its purposes, practices, how it is enacted and its outcomes.

Given this, Chapter 6, *Purposes of Vocational Education*, as the title suggests, seeks to delineate the purposes of vocational education. It holds that as vocational education is concerned with developing, remaking and transforming occupational practices that have historical, cultural and societal sources, it also has both important social as well as individual purposes. So, while accepting the premise that vocations have important personal dimensions, the concept of vocations identified, elaborated and discussed here also focuses on those human activities which are culturally derived as they expressly address human needs and advancement. Typically, these vocations are those which attract remuneration in the form of paid work. However, this is not to exclude a consideration of important societal roles such as the unpaid vocation of being a carer to the younger, sick or aged. In all, the chapter identifies a set of five key purposes associated with (i) remaking and transforming culturally derived occupational practices; (ii) securing economic and social goals; (iii) sustaining societal continuity and transformations; (iv) individual fitness and readiness; and (v) individual progression. Each of these is elaborated and exemplified as being purposes towards which the project of vocational education can be directed in different degrees and with different intensity.

In consideration of how these purposes might be realised, Chapter 7, *Vocational Education Curriculum*, advances views about how the vocational education curriculum might be understood in terms of meeting these needs. It does this through establishing a basis to consider what curriculum means in terms of vocational education, rather than schooling, for instance. In doing so, it elaborates definitions of curriculum and identifies the particular qualities of curriculum that are pertinent. Consistent with what has been advanced earlier in the considerations of vocations and occupations, as well as the formation of vocational education as a system of education, the chapter proposes that curriculum needs to be considered as something which is intended by its sponsors and stakeholders (i.e. the intended curriculum) and as something which is implemented through vocational education and other kinds of institutions and by people such as teachers, trainers, and workplace supervisors. This implementation is also constrained by the available resources, expertise and circumstances. Consequently, this conception of curriculum is referred to as the enacted curriculum. However, there are also the ways in which students come to engage with and learn from and through what is implemented. This is referred to as the experienced curriculum and is held to be central to the project of vocational education because whilst being common to all fields of education, so much of vocational education is centred on what it means to individuals (i.e. their vocation) and also their needs to engage effectively and independently in their work lives. These

three dimensions of curriculum are also points at which decisions about it are made. Importantly, in recent times and perhaps increasingly so, much effort has been centred on the intended curriculum as a means of realising the goals of its sponsors (e.g. state, government and industry stakeholders). However, whilst the needs of the stakeholders and interests need to be articulated and represented, it is a mistake to believe that an educational provision can be premised upon sets of intentions that largely are derived outside the circumstances in which the educational provisions are enacted and without understanding those who are to learn through and from what is enacted.

Decision making is then central to *The Provision of Vocational Education*, the title of Chapter 8. This chapter proposes that the provision of vocational education is premised upon decision making of different kinds and at different points in the process of development and enactment. Consequently, in considering what constitutes the provision of vocational education, it is necessary to account for how the decision making associated with developing intended curriculum shapes its form and focuses. Moreover, as this interest in organising the vocational education provision has become a key part of governments' social and economic agenda, the extent of the control and regulation of vocational education has increased. Yet, no level of prescription and regulation can account and advocate for the specific circumstances in which vocational education provisions are implemented or accommodate, let alone determine, what occurs during those enactments. That is, to even meet the prescribed processes and goals, administrators and teachers, trainers, practitioners and supervisors will need to make decisions about how student experiences are organised and realised. These will inevitably be highly diverse and no amount of regulation or prescription can overcome the need for discretion on the part of those who implement vocational education provisions.

Finally, drawing from the early discussions, critiques and propositions, Chapter 9, *Vocational Education in Prospect,* speculates on how vocational education might best be positioned, conceptualised, organised, implemented and experienced in realising something of the range of its potential purposes. It argues that it is not sufficient to attempt to merely improve the provision of vocational education. Without enhancing the esteem associated with the range of occupations that are addressed within this field of education, efforts to enrich its purposes and processes will always be hampered by societal esteem that will work against parts of its provision and seek to position it as being marginal and less desirable than other fields of education. Certainly, to meet the significant demands being placed upon it by the community and by the economic interests within that community, including those who participate in it as students or learners, its purposes need to be clear, its standing needs to be more elevated, its relationship with other sectors and agencies needs to be far more mature and balanced, and the educational intents (i.e. aims, goals and objectives) need to be fashioned in ways which are commensurate with it realising its purposes; and the educational processes that are deployed to realise these intents need also to be of the kind that are fitted to achieve these outcomes. Although this is seemingly a significant request, it is noteworthy that the standing of occupations, and indeed vocational education, is quite different across a range

of countries and also at different points in time in their histories and trajectories. Therefore, these qualities are not fixed; they are negotiable and transformable. In all, it is proposed that the ideas elaborated here will assist in a more informed discussion about the nature of vocational education, and how its project can be organised and implemented in ways which will meet the needs of those who have such high expectations of it.

Chapter 2
Positioning Vocational Education

> *... vocational education is treated like the other special education – subject for the misfits – a place to put kids that don't fit anywhere else. Many high schools situate the vocational education department's on outer wings, in outside buildings or in the basement – special education is often found in the portable classroom trailer. ... vocational education is the training that kids can could fall back on ... and that keeps them out of trouble. Parents are rarely proud to announce their child's placement in a vocational education program.*
> *(Steinberg, 1995, p. xii)*

> *... the sense of vocation can only come to life in a social practice. Moreover, social practices such as teaching, nursing, parenting, and ministering have their own integrity. They have their own noninterchangeability that must be balanced with the individual's uniqueness or sense of calling.*
> *(Hansen, 1994, pp. 271–272)*

Positioning Vocational Education

Given that it is characterised as much by its diversities as its commonalities, it is important to commence this elaboration of vocational education by delineating something of its scope, diversity and commonalities. Consequently, this chapter seeks initially to position the discussion on vocational education and how it should be considered as a distinct field of education. This goal is realised by establishing a set of parameters through which vocational education can be considered as a broad field of education that is served by a range of educational sectors (i.e. schooling, vocational education systems and higher education). An initial means to achieve this goal is to overview something of its commonalities and distinctiveness, and to highlight its diverse forms, traditions, institutions and standing. Although the overall purposes of vocational education can be thought of as consistent and identifiable, the diverse forms of its institutions and the means by which it is organised and enacted tend to mask these commonalities. These diversities, however, offer cautions against making easy and unhelpful generalisations about this field and are evidence of its richness. Indeed, the field of vocational education is subject to sets of

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long-standing sentiments and precepts that have arisen through history and are reinforced by societal mores and practices which pervade both societal and professional discourses. Such sentiments and precepts sometimes stymie productive discussions and evaluation of the sector.

Thus, following this articulation of its distinctiveness and diversities, it is helpful to outline a set of premises that both position it and provide some premises for how vocational education can be advanced and discussed. Such premises include the proposition that all education is ultimately vocational insofar as it must address the needs, interests and developmental trajectories of those who participate in it. That is, education assists individuals in realising their goals and the ambitions associated with the activities to which they are drawn and are of worth to them, their affiliates and communities. This proposition then leads to a discussion about how the worth of vocational education should be considered in terms of either the participants (i.e. students) or other concerns (e.g. those of government and employers).

Distinctiveness and Diversity Within Vocational Education

There are a set of commonalities that make vocational education a distinct field of education. Yet, such is the richness and diversity of their forms and institutions that they can easily mask these commonalities. The overall commonalities across the range of offerings from universities, vocational colleges and schools that constitute the broad field of vocational education are broadly associated with developing and sustaining individuals' capacities required for work and working life. That is, their educational purposes are primarily concerned with (i) identifying the knowledge required for effective performance in an occupation; (ii) organising experiences for the learning of that knowledge; then (iii) finding ways of enacting the experiences so that learners can become effective in occupational practices and (iv) also be sustained in that effectiveness across working life including transitions to other occupations. These commonalities are the case regardless of whether individuals are learning about medicine, law, hairdressing, tourism, cooking or safe work practices, or even unpaid pursuits such as hobbies. Such commonalities do much to characterise the field of vocational education as a distinct field of education, despite its diversity and the apparent differences across different kinds of institutions that contribute to this field. It is this distinctiveness that sets vocational education apart from other fields of education.

However, observers might rightly conclude the particular distinctiveness is exercised in quite different ways. So, whereas schooling is seen to take place in schools and higher education in universities, vocational education occurs across a range of educational sectors including these two. Therefore, capturing that distinctiveness is not always straightforward or easily achieved because of the different kinds of traditions and institutions that stand to obscure these commonalities. However, a consideration of both the scope and the distinctiveness of the field assists both in delineating and clarifying what constitutes vocational education. Clearly, the role of assisting individuals to learn about, develop capacities to engage in, and promote

their ongoing capacity to practise an occupation is not solely undertaken by the one sector of education that in many countries is referred to as vocational education. Instead, this role is enacted within both higher education and schools. For instance, the school sector is increasingly given the tasks of focusing on preparation for work and identifying students' preferred occupations and then assisting them to secure the capacities required for working life.

So, in seeking to delineate vocational education as a distinctive field of education requires the immediate acknowledgement that it comprises a field enacted across a set of educational institutions each with their particular labels and status. This enactment includes, but is not restricted to, the set of institutions that are named and commonly associated with vocational education systems internationally. For example, in Australia there are the Technical and Further Education (TAFE) institutes, in Britain the Further Education colleges, in Canada and the USA the community colleges, in Finland the vocational education colleges and in Singapore and New Zealand the Polytechnics. In each case, while these institutions are a central element of vocational education, they do not comprise its totality in their host country. These vocational education systems can be quite diverse in terms of their purposes, provisions and participants in their respective countries (Hanf, 2002; Thompson, 1973), making it difficult to articulate vocational education as being a highly homogeneous sector of education. Certainly many, but not all, of these systems are largely concerned with initial vocational preparation and the overwhelming majority of their students have just completed compulsory education (i.e. an education system for school leavers). So, few adults are likely to participate in these kinds of institutions, and their provisions for continuing education might be quite limited (e.g. in Germany's *Berufsschulen* and Singapore's polytechnics), if they exist at all. In contrast, other vocational education systems (e.g. Australia and United Kingdom) also have an extensive provision for continuing education and training (i.e. education provisions focused on ongoing development beyond initial preparation). This means that many older adults participate in these programmes, and as such they attend in different modes and times from school leavers.

Yet, even with those systems that focus on initial occupational preparation, the extent of the differences in provisions is such that they cannot be easily compared. For instance, on the one hand, there are the Swiss, German or Austrian dual apprenticeship systems in which a high percentage of those countries' school leavers are engaged in specific occupational preparation programmes. In these programmes, apprentices divide their time between engaging in tasks in workplaces, often as employees, and being taught in vocational schools in short blocks of attendance. These dual programmes require significant levels of engagement by local employers and industry and are founded on tripartite (i.e. government, industry and unions) alliances to secure commonly agreed goals. These educational arrangements are regulated by legal measures to protect young people and to mandate their conditions of employment. Moreover, they are supported by an extensive institutional infrastructure that extends to the qualifications required to teach in vocational colleges and assist apprentices in workplaces. Yet, even within this kind of approach, there are variations across the German länders and the Swiss cantons. Moreover,

rather than having a dual provision of experiences, the Swiss model includes a third space – a specialist training facility – which is not a typical feature of the German system (Gonon, 2002). So there are differences within a seemingly standard model of apprenticeship.

On the other hand, in the college-based provisions of vocational education in the Further Education Colleges in the United Kingdom, the Community Colleges in the United States, and polytechnics of Singapore, New Zealand, Australia and Britain and the German *Fachschule*, the vast majority of the students' experiences are within the educational institution. Of course, most of these institutions have workplace affiliations that are exercised in different ways across their programmes, and typically have externally mandated curriculum and credentials. Yet, there are clear distinctions in what it means to be a student in programmes that are either largely founded within a vocational education institution or one that is overwhelmingly founded in a workplace setting. The one, two or even three kinds of settings that are available for learners and the kinds, duration and extent of their access to workplaces during the programme differ widely. For instance, across countries such as Germany, Switzerland, Australia and New Zealand, many participants are apprentices who spend upwards of 80% of their indenture in the workplace as employees. Many of these apprentices are unlikely to identify themselves as 'students', but see themselves as apprentices who are novice trades workers (e.g. Chan, 2009). This distinction is likely to shape how these apprentices come to identify themselves, as novice workers rather than students, for instance, and how they engage with educational institutions when they attend them. In contrast, in countries with predominantly college-based vocational education, learners are likely to view themselves as students and any views about being novice practitioners might be fanciful and naive (Billett, 2000a). Even so, these students are likely to hold particular views about work and workplaces that will shape how they engage with both their college studies and workplace experiences. And, it is these kinds of qualities of workplace engagement that make it a distinct field of education. Along with apprenticeships, medical and legal education comprise exemplars of initial vocational education. All of these kinds of provisions are directed towards realising occupational- or industry-specified measures, standards and certification through student learning.

Certainly, the particular occupational focuses for and emphases within the vocational education sector's programmes are often different from those in higher education. Yet, these differences are most likely to be related to the particular occupations served by each kind of educational institution. Generally, professional and para-professional occupations are served by universities while occupations that are seen to be sub-professional are served by the vocational education sector. The variations that arise from this general rule may well either emanate from how an occupation is categorised in a particular country and how that classification differs across countries or alternatively the standing of a particular group of workers. For instance, nursing is an occupation often classified as being para-professional whose preparation occurs in higher education in many, but not all countries. However, beyond these quite superficial differences, qualitatively and conceptually, the kinds of vocational education provisions offered in both the higher and vocational education sectors are quite similar in terms of their purposes, processes, experiences and

outcomes. They aim to develop the combination of conceptual, procedural and dispositional capacities required for effective practice through intentional experiences often enacted across both educational and practice (i.e. workplace) settings.

Similarly, educational provisions in secondary schools and junior colleges that aim to prepare school students for general working life, or even specific occupations, often have purposes and forms that are similar to those in specialist vocational education institutions. Indeed, the list of institutions and provisions which can be considered vocational is even longer than this. For instance, in the United States, Thompson (1973) advised that vocational education programmes are available through public schools; private and proprietary secondary schools; trade, industrial and vocational schools; area vocational schools, junior colleges, community colleges, penal institutions and 4-year colleges. Moreover, in other countries there are trade skills centres, industry specialist centres and even vendor-training arrangements that provide certified qualifications. Yet, qualitatively, the provisions through these institutions are no different from those that prepare professions in universities. This wide range of institutional arrangements and provisions, which are all directed to similar educational purposes merely reinforce the scope and depth of this distinctive field of education.

Consequently, it also seems helpful to describe this wide-ranging provision as an encompassing or meta concept: the field of vocational education. By categorising it as a field of education, with distinctive purposes, processes and intended outcomes, the task of articulating a consolidated account of vocational education becomes more possible and plausible. This approach helps to counter simple assumptions and distractions arising from well-established sentiments and provides a firm base to elaborate the project of vocational education. It also permits the diverse focuses for, purposes of and standing of vocational education and means of enactment through a range of institutions to be acknowledged as key elements of this distinct field of education.

To summarise, the distinctiveness of vocational education as a field of education is founded on a set of core purposes, but how these purposes are articulated and responded to, and the institutions organised for these purposes remains diverse. Accordingly, to capture something of the scope of the educational project which comprises vocational education, the following section further elaborates this diversity through a consideration of its focuses or key purposes.

Focuses for Vocational Education

To continue elaborating the distinctiveness of this field of education, it is worthwhile articulating the scope of the diversities that it comprises. As well as vocational education being associated with a diverse set of institutions, its focuses are equally varied. As a starting point, and in seeking to capture what makes vocational education distinctive as a field of education, it is considering some definitions of vocational education. For instance, Skilbeck, Connel, Lowe, and Tait (1994) describe it as comprising

> ... those educational functions and processes which purport to prepare and equip individuals and groups for working life whether or not in the form of paid employment. (p. 9)

Wall (1967/1968) proposes that vocational education is

> ... a scheme of education in which the content is intentionally selected, wholly or largely by what is needed to develop in the students some of the most important abilities on which professional competence depends. (p. 53)

Giroux (1985) claims that vocational education is

> ... a practice that emphasises the development of knowledge, skills and attitudes that relate to a student's future participation within the economic sector of one's community and nation. (Giroux, 1985, p. iv)

West and Steedman (2003) propose that vocational education comprises

> ... a system of education which has, as its subject matter, knowledge used within certain trades, occupations or professions. (p. 1)

The key focus within these definitions is on preparing and equipping learners for working life. Vocational education is seen as a provision of education that occurs prior to individuals or groups commencing their working lives, and which prepares them for it. The reference to particular forms of working life, paid or unpaid, and also the concept of equipping individuals emphasises the importance of developing the kinds of capacities that will permit them to be effective in the specific set of activities, most likely in paid employment. Two of these definitions explicitly refer to particular kinds of work within particular occupations. This suggests that students need more than a general preparation for working life. There is also the need to develop domain-specific forms of knowledge (i.e. their conceptual, procedural and dispositional dimensions) that collectively permit effective performance of the occupation, or non-paid activities. Whilst leaving open options for working life other than through paid employment, most provisions of vocational education have in the past been, and are currently, focused on securing the particular occupational capacities required to secure paid employment and for graduates to be employable within it. Indeed many, if not all of the vocational education systems were intentionally established by their nation states to address concerns variously associated with the supply of skilled labour (Greinhart, 2005; Hanf, 2002), problems of unemployed youth (Dewey, 1916) and concerns to engage these young workers with civil society (Gonon, 2009b). Even before then, most of the provisions of university education were directed towards preparing graduates for occupations such as medicine, law and the clergy (Elias, 1995).

The emphasis on preparing and equipping individuals in these definitions only addresses one of the two imperatives that Dewey (1916) proposed as being central to education for vocations. He proposed that these were, firstly, to assist individuals in identifyingto what vocation or calling they were suited and, secondly, to develop the capacities they require to successfully enter and practise that occupation. Consequently, although both of these imperatives emphasise initial preparation for working life, Dewey (1916) included the need for assisting individuals make appropriate choices about their preferred occupation. Hence, a key element of what

Skilbeck et al. (1994) refer to as preparation for working life could be to assist individuals in identifying links between their capacities and interests and the kind of occupations in which they are interested and to those they are suited. Here, Dewey (1916) may well have been mindful that, across human history, the majority of individuals were 'called' to their work not necessarily on the basis of their interests, capacities or particular talents, but because that was all that was available to them. That is, whether referring to what occurred in Central Asia, Ancient Egypt, Europe and China, and likely elsewhere, societal factors associated with class, gender, situation and other kinds of societal factors, or what is referred to as institutional facts (Searle, 1995), have shaped what occupations individuals have been called to, let alone been permitted to access. This limiting of choice, Dewey held as being wholly unsatisfactory, proposing that for individuals to engage in uncongenial callings, those to which they were not suited or interested, was unhelpful and a waste of human capacities and potentials.

> An occupation is the only thing which balances the distinctive capacity of an individual with his social service. Nothing is more tragic than the failure to discover one's true business in life, or to find that one has drifted or been forced by circumstances into an uncongenial calling. (cited as seen Dewey, 1916, p. 308)

Dewey's concern has relevance today. Moreover, the waste he refers to needs to include both the significant societal as well as personal cost that arises when individuals find themselves in uncongenial callings. For instance, in contemporary times, there are high attrition rates both during initial preparation for work (e.g. through apprenticeships) and also low retention rates after that preparation in some occupations (e.g. hairdressing and nursing) that occur across many countries, even those with highly esteemed vocational education sectors. This attrition often comes at a significant cost for those individuals, in terms of the time and costs they have invested in preparing for occupations that will not become a source of fulfilment, income and certainly will not become their vocations. The rates of cessation for entry-level vocational education may exceed 50% in some countries.[1] While a range of factors lead to this level of non-completion, this high rate of attrition also indicates that many participating in these kinds of vocational education provisions are either uninformed or misinformed about their selected occupation. So, for Dewey (1916), who appears to have first used the term 'vocational education', the initial preparation and equipping of individuals to participate in their preferred occupation, had to be preceded by an educational process that informs individuals about the qualities, attributes and requirements of the occupations to which they are drawn. In some instances, Dewey's first consideration has been taken up in a specialised form of education within schooling systems: career education. However, the degree by which this educational focus is comprehensively enacted and in what ways that focus is effective remains an open question. For instance, it may not be seen as a

[1] The actual level of this attrition is often difficult to identify because government will often seek to mask them. Some countries (e.g. Switzerland) claim to have no national figures. In Australia, the level of non-completion from structured entry-level training is currently as high as 50%, commentators in other countries report anywhere from 30% upwards.

responsibility of schools and schooling to organise this provision. Yet, it also does not often feature strongly in tertiary education (i.e. higher and vocational education) provisions.

Nevertheless, there are curriculum processes that have been enacted to provide an alignment between vocational education, students' capacities and interests, and the occupations to which these students might aspire. These processes include the provision of text-based information about occupations that can be used to assist in making informed choices about their selection of an occupation. There are also those processes that provide experience of the particular occupation within vocational education. This kind of provision might include students sampling a number of occupations to identify which they are most interested in and suited to. The pre-vocational education programmes that used to be offered in Australian TAFE colleges provided students with access to a range of occupational activities, albeit in college settings. Students rotated through experiences in tasks associated with construction, electrical, fitting and turning, and motor mechanic occupations, for instance. Then, they would attempt to secure an apprenticeship in the occupation that was best aligned with their interests and capacities. There are also provisions that assist novices make choices about which area of the occupational practice best suits their interests and capacities. For instance, group apprenticeship arrangements, again such as those operating in Australia, can provide a range of experiences within a particular occupation that provide information about the different sub-occupational categories and their work requirements. For example, in some, I am familiar with, apprentice chefs were rotated through a range of commercial cooking settings. They might work first in a banquet kitchen, then the a la carte kitchen, where each meal is prepared individually, and then a bistro or buffet all in the same large hotel. Then, they might move to work in an inner-city restaurant and then to a hospital kitchen. In this way, they had the opportunity to experience a range of settings. From these experiences, as well as developing understandings about different ways in which professional cookery is practised, they can make informed decisions about which field within the occupation they might want to secure employment and specialise. Similarly, trainee nurses who learnt to nurse in hospital-based programmes were rotated through a range of different wards and, in doing so, came to experience and learn about a range of nursing work. Through these learning experiences they were able to make informed choices about the specific field of nursing (e.g. casualty, oncology, maternity, general, mental health, intensive care) in which they might want to practise and specialise. In both these cases, the two kinds of goals that Dewey referred to are being addressed, albeit in different ways and sets of intensity.

Specificity of Learning Outcomes

Some conceptions of vocational education emphasise preparation that is less occupationally specific and seek to primarily develop capacities associated with a general preparation for working life. Indeed, Dewey's (1916) goals for vocational education

went beyond personal emancipation and development, and positioned it as a means for individuals to engage with, and through which to transform, society. So, more than preparation for a specific occupation, he was very much concerned that graduates have the capacity to be able to transform the work life practices they engage with and make them better, thereby meeting the needs of the community as well as practitioners or sponsors.

> The kind of vocational education in which I am interested is not one which will adapt workers to existing industrial regime; I'm not sufficiently in love with that regime for that. It seems to me that the business of all who would not be educational timeservers is to resist every move in this direction, and strive for a kind of vocational education which will first alter the existing industrial society, and ultimately transform it. (Dewey, 1916, p. 42)

This view captures something of the critique exercised by those whose preference is for a general rather than a specific vocational education. Yet, given that nation states largely sponsor vocational education, and they are increasingly looking to vocational education to deliver specific economic (e.g. skill development) and social (e.g. employment for young people) goals, non-occupational focuses are not widely tolerated in contemporary vocational education. Indeed, it seems that, increasingly, those who sponsor such educational provisions (e.g. governments and powerful economic interests such as industry and large enterprises) are doing much to shape the focus for vocational education provisions regardless of whether it is offered through vocational or higher education institutions. Moreover, increasingly, students, as sponsors of their own education, are seeking to realise their occupational goals and outcomes through these educational provisions. They are seeking direct returns on their commitments in time, funds and opportunity costs. Hence, many, perhaps most, are keen for vocational education to deliver them outcomes that will lead to employment of the kind they prefer and/or meet their material needs and personal goals (Billett, 2000a). Hence, these 'stakeholders' seem increasingly to want educational provisions that secure employment and career-related outcomes for them. However, there is not always direct alignment between what governments propose through nationally mandated education provisions and what students want from those provisions (Cho & Apple, 1998). So, vocational education is now increasingly expected to address interests associated with and focuses on securing the capacities required for specific occupational roles that are shared by government, industry and also individuals. Yet, curiously, Dewey's concerns might be partially being addressed by individuals' active process of remaking their work as they confront particular tasks and in particular circumstances (Billett, 2009a). Through these processes, individuals remake and transform work activities, which may more closely meet the kinds of outcomes Dewey (1916) wanted. The point there is that such transformations are most likely to be premised upon and are a product of individuals' processes of engagement in constructing of what they can access.

However, not all provisions of vocational education are equally focused on specific occupations or specialisms within occupations. For instance, what has distinguished the provision of vocational education in the United States from many of its counterparts in Europe was an attempt to provide a more broadly based and less

occupationally specific provision of vocational education.[2] Apprenticeships were rejected as a widely applicable educational provision for young people at the turn of the twentieth century, because of concerns about the capacities of American workplaces to support that model of learning (Gonon, 2009a). In their place, community colleges were established in American states to provide a vocational education provision that had a greater emphasis on general educational outcomes than the European apprenticeship model or occupationally specific vocational education programmes.

The question of how occupationally specific should these programmes be has been long debated and not only in the United States. Indeed, the specificity of outcomes is a recurring theme, particularly in conceptions associated with young people's preparation for working life. The emphasis for vocational education proposed by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) in the 1970s, like Dewey's, suggested that, rather than preparing students for a specific occupation, it should comprise a broad preparation that would equip individuals for long working lives. This preparation was proposed to include general and adaptable procedures (e.g. problem-solving strategies) that would prepare students for a working life likely to be characterised by the need for constant change in requirements (Faure et al., 1972). It was held that a preparation focused on a specific occupation would leave graduates too narrowly skilled and ill prepared for the inevitable changes that would arise in employment across their working lives. The educational responses posited by these authors are focused on developing a set of cognitive capacities that would permit individuals to respond to the changing requirements of work and occupations and transitions across occupations throughout their working lives. Hence, rather than an occupationally specific focus, the emphasis was on an initial preparation to be adaptive and adaptable learners across their lives. In this way, the vocational education provision had overall goals similar to those of schooling. That is, a general preparation for young people that would equip them to adapt their knowledge to whatever domain of activities they were to encounter. It follows then that the kinds of provisions of vocational education that are offered are shaped by decisions about the degree by which it should be more or less occupationally specific. Such decisions may also need to be informed by whether that specificity extends beyond the canonical knowledge of the occupation and encompasses what is required in particular workplace settings.

Some view the development of generally applicable competencies as being the most worthwhile use of educational resources and provisions. The more recent versions of these generally applicable capacities are the core competencies that have been developed to guide learning of general employability capacities (e.g. problem-solving strategies, communication). Examples here include the SCANs used in the

[2]This outcome was also ironic. Allegedly, Dewey lost this debate to David Snedden who wanted a more occupational-focussed provision of education, but the institutional arrangements and curriculum frameworks that were established came to reflect a college-based vocational education system that was one quite distinct from the European apprenticeship-based models.

USA, the Mayer Key Competencies in Australia and the Key Competences for Lifelong Learning as advanced in the European Union. These core competencies have been proposed by their sponsors as being adaptable to the range of employment circumstances that individuals will encounter across their working lives. However, there is little evidence that these capacities alone are able to deliver the kinds of outcomes claimed for them. Certainly, and consistently, evidence about capacities to engage in non-routine thinking and acting (i.e. adaptability) indicate that within a domain of activities, such as an occupation, having a rich body of domain-specific knowledge is the foundation upon which adaptable capacities (i.e. those able to respond to novel circumstances) will arise. However, that domain-specific knowledge may well be rendered more adaptable with the promotion of particular strategic capacities (Ericsson & Smith, 1991). It is far less likely that 'generic' strategies, such as these core competencies or cognitive capacities, alone will be generative of effective problem-solving within a specific domain of knowledge, such as an occupation, let alone the particular requirements of the setting in which the occupation is practised (Beven, 1997). Indeed, the worth of general capacities has been weakened by the growing understanding about the situated character of knowledge and knowing (Brown, Collins, & Duguid, 1989). That is, expert performance is highly situational (Billett, 2001a) because of the range of local factors that are needed to secure effective performance within a particular workplace. The efficacy of these kinds of generic strategies may be restricted to very broadly applicable rules or procedures (e.g. look before you leap, think before you act, plan carefully and comprehensively) (Evans & Butler, 1992) rather than informing and detailing the means by which occupational goals can be secured. However, the lack of evidence about the utility of such generic capacities has not inhibited governments and global agencies such as the OECD from promoting them. What seems to be the case is that rich domain-specific knowledge is the base upon which other capacities, such as those proposed as core competencies, act, but are also dependent upon. So, there is interdependence between the domain-specific knowledge and those capacities that are not restricted to specific occupations.

Key Focuses

The above discussion emphasises a provision of education that is focused on preparing and equipping individuals for an effective working life, as the four definitions reinforce. Within such a view of vocational education, there is a focus on an educational provision that:

1. has goals and processes which inform about the requirements of working life, thereby assisting learners' decisions about transitions from schooling to working life,
2. can inform learners about particular occupations, thereby assisting them to select an occupation that is appropriate and suited to their interests, needs and capacities,

3. equips these learners through the development of the occupationally specific concepts, procedures and dispositions required to practise their selected occupation, and
4. provides experiences to secure educational goals associated with understanding working life and developing the kinds of capacities needed for managing the changing performance requirements of occupational tasks in work settings.

So, when the project of vocational education is viewed as being largely about initial preparation either for working life more generally or for a specific occupation, it needs to be exercised in quite distinct ways to realise these particular kinds of educational purposes. Skilbeck et al.'s (1994) definition also refers to non-paid employment, which seems reasonable as activities such as keeping a home, being an artist or a musician, or pursuing hobbies have both similar kinds of procedural and the conceptual requirements, and distinct dispositional elements. As discussed in Chapter 3 on vocations, unpaid employment is sometimes strongly associated with an individual's sense of self and identity, thereby capturing what for them constitutes a vocation. For instance, somebody might have as their vocation being a musician or an actor yet, needs to find employment in another occupation to sustain their life interest and vocation.

However, beyond the important concerns and purposes associated with the initial preparation for working life, usually for young people's entry into the world of work or specific occupations, vocational education also needs to support individuals' and groups' ongoing learning throughout their working lives. This emphasis is becoming an increasingly central concern given changes to work, demographics and individuals' lifelong learning needs (Organisation of Economic and Cultural Development (OECD), 1996). The profile of occupations within labour markets, the availability of and access to those occupations and the requirements for work are now changing more frequently and by greater degree than in earlier times (Appelbaum & Batt, 1994; Bernhardt, Morris, Handcock, & Scott, 1998; Howard, 1995). Hence, individuals' initial occupational preparation is perhaps less likely than ever before to be adequate for an entire working life. This is because of (i) transformations in the capacities required to secure employment in the kinds of work that is available in the labour market; (ii) the need to sustain employability across their working lives as work changes; and (iii) keeping up with the skills required as the nature of that work transforms. Further, work requirements are often quite situationally specific and, since individuals' work life trajectories typically include occupational transitions, or at least significant change within occupational requirements, or as individuals' interests and aspirations change and capacities evolve (Billett, 2006), more than one set of skills will be required across a lifetime. Consequently, the requirements for work and the means by which work is undertaken are increasingly subject to change across occupations. The point here is that ongoing learning to sustain employability is likely to be a universal requirement for those who work, and perhaps more so in the future.

Furthermore, working life is getting longer; therefore, requiring workers maintain their employability over a longer period. Most countries, particularly those with

advanced industrial economies, have ageing populations. One consequence of this demographic change is that working life will get longer, and there is a growing need to maintain employability (i.e. being skilled and employable) across a longer working life. For workers in many countries, working life will extend well into their seventh decade, and they may need to be supported educationally to sustain their employability as the requirements and opportunities for work transform. Yet, provisions of vocational education may need to become more innovative in meeting these needs. One reason for being innovative is that employers often prefer to support younger rather than older workers in their continuing vocational education (Gutman, 1987; Quintrell, 2000). Unless these sentiments change, issues of access to educational provisions will arise and in ways that meet these workers' availability, readiness and needs. Consequently, beyond the kinds of concerns emphasised in the definitions above, consideration of the project of vocational education needs to go beyond individuals' entry into working life (i.e. initial preparation or 'entry level' vocational education). Instead, it needs to support learning for the changing requirements for work that will be experienced across contemporary working lives (Colin, 2004). All these imperatives and changes demand ongoing development of individuals' capacities across working lives, which are likely to become a growing component of the provision of vocational education as both a field and a sector.

In the ways discussed above, vocational education has a set of quite diverse focuses that comprise particular emphases for individuals' learning. In the following section, this theme of diversity continues through a discussion of the traditions and institutions that have come to comprise the field of vocational education.

Diverse Traditions and Institutions of Vocational Education

Beyond its diverse focuses, the field of vocational education is also characterised by a diversity of traditions and institutions. These traditions relate to the origins of occupations, the cultural practices that constitute them, the affiliations and associations that support their enactment and the societal interests associated with their preparation. For instance, many forms of work are highly gendered. The majority of occupations for which there are apprenticeships in countries such as Australia and Britain are dominated by males and occupations which are seen to be the preserve of men. Consequently, women's participation in apprenticeships is usually restricted to just a few occupations. There are also traditions such as some occupations being supported through prestigious educational institutions and programmes, whilst others are to be learnt only through practice, in practice settings and without certification. The differences in these institutional arrangements are often premised on and perpetuate occupational status and levels of remuneration. Some vocational education provisions, such as apprenticeships and medical education are organised through arrangements involving a range of institutional partners each with their own responsibilities for the learners. However, other occupations have fewer opportunities for or traditions of partnerships. Some provisions are highly

regulated (e.g. plumbers, electricians, teachers), others are much less so or not at all (e.g. hairdressing).

The form and nature of these arrangements can differ across countries. In countries where apprenticeships are essentially a default option for those not continuing on to higher education (e.g. Germany and Switzerland) there is often a far wider range of occupations with apprenticeships, than in countries where this educational option is not exercised (e.g. USA). Also, in some countries, access to this form of education is premised upon young people securing employment as apprentices. Hence, without this employment, you cannot be either apprenticed or learn the occupation. Such arrangements mediate the opportunities for securing apprenticeships in different ways across and within countries. There are also institutional factors of different kinds that influence the level of apprenticeship completions in countries such as Australia, as well as in institutional-based programmes in the United States (Bailey, Jeong, & Cho, 2010). Yet, in Canada, apprenticeship is founded on quite distinct traditions that largely avoid issues because apprenticeships rarely involve school leavers, with most apprentices commencing at the relatively mature age of 26. Hence, apprenticeships in Canada may serve quite a different educational purpose than in many European countries where they are primarily a bridge between school and working life. Instead, they are an educational provision for individuals who may well have sampled different kinds of work and occupations before selecting the occupation in which to seek an apprenticeship. In these ways, a common mode of entry-level preparation takes quite distinct forms across countries as shaped by tradition and culture.

Also, the institutions that provide vocational education are diverse, extending to universities, schools, vocational educational institutes and colleges, workplaces, trade centres and professional development centres, but in different ways across countries. Hence, shape and form of vocational education presents quite differently because of varying traditions and institutions. In some countries, such as Britain, Australia, USA, the Scandinavian countries and Finland, the provision of vocational education sits within what is referred to as tertiary education: that beyond schooling. Many, if not most, countries have universities, and even different levels and categories of universities that constitute a key element of tertiary education systems. Moreover, in some, but not all of these countries, there are articulation arrangements amongst the different tiers of education. This can include students within the vocational education sector getting significant credits should they progress on to university. However, not all countries encourage or permit these kinds of articulations and credit. Indeed, in some, individuals' educational trajectories are fixed by the results of the final school assessments (e.g. Germany). Other institutional arrangements, such as issues of prestige and societal esteem influence the organisation of these institutions. For instance, the German, Swiss and Norwegian systems all have hierarchies of institutions that are labelled as vocational schools, technical colleges and universities. Within these arrangements, the vocational education institutions are usually held as being below higher education in terms of a hierarchy of qualifications, entry requirements and status. This hierarchy is often formalised in these countries by national qualification frameworks that stipulate the level of

education awards (i.e. certification) that can be offered within each tier of tertiary education. These kinds of arrangements are constructed in different ways across countries and are utilised and adhered to by degree. Indeed, in Europe there are now processes are being enacted (e.g. Bologna Process) to achieve greater uniformity and coherence with such educational arrangements.

In addition, a number of countries have the private (i.e. non-state funded) provision of vocational education, which can take particular forms. For instance, in Thailand a large portion of the vocational education system is privately owned. Sometimes the private provision of vocational education is promoted by government using market-based processes of tendering and open access to training contracts (Billett, 2000b). Public and private training providers compete for the same contracts for public vocational education provision. The creation of a competitive market in which public institutions have to compete with those from the private sector is used by government as a way of trying to improve performance within public sector organisations. Then, there are moves to regulate private provisions of vocational education when they are viewed as not advancing national interest. For instance, in Singapore during 2010, the private provisions of vocational education were unified under a national qualification system partly to provide greater uniformity in their course provisions and certification. Consequently, the vocational education system became increasingly organised within frameworks of regulations and arrangements to manage the realisation of national imperatives within a market-based provision.

Specialised educational facilities that sit outside either the workplace or mainstream educational provision make up another form of vocational education. These include centres that have been established to develop the skills for specific occupations or even enterprises that might perform this role. Sometimes, particular manufacturers of motor vehicles have to own training facilities and certification processes because they want those who maintain their vehicles to have access to specific knowledge about their vehicles. Indeed, some licensing arrangements are premised on vendor provisions. For instance, the certification for working on commercial and military air frames and engines are administered by the manufacturers of the aeroplanes and engines. There are also other kinds of very specific vocational education associated with particular pieces of equipment or software that either occurs within the vendor's location or somewhere else.

Hence, from the instances provided above, something of the diversity of the traditions and institutional arrangements that constitute the diversity of provisions of vocational education is made explicit. It is certainly the educational field that is most engaged with institutions, agencies and individuals outside educational institutions.

Consistency Within Diversity

However, despite the forms of diversity outlined above, there is also much that is common and coherent across the educational field of vocational education.

Like other educational sectors, vocational education is often and increasingly organised and regulated from outside the educational institutions in which it is enacted. There are particular qualities of bureaucratic and administrative controls that play out across all educational sectors, although these are likely to be most extreme in situations where programmes are designed and enacted to meet the needs of external stakeholders, the most strongly when these address key imperatives (i.e. government concerns about youth unemployment, skill shortages; employers concerns about skills and quality of skilled workers etc). External stakeholders can be seen to shape the content, assessment and certification of provisions within the field of vocational education. Curriculum documents or syllabuses are increasingly prepared centrally and the ways in which they are enacted are increasingly specified as is the means by which students are assessed: a situation that is becoming common across all major fields of education. Indeed, within the field of vocational education, and regardless of whether the programme is being offered through universities or technical colleges, there is a growing interest in and expectation of industries' and professional bodies' involvement. Moreover, this bureaucratic control appears to grow when educational provisions are seen as being key vehicles through which countries can secure their economic and social development. However, whereas in the past, this level of control was heightened during periods of social and economic crises, now it seems that it has become of ongoing interest in terms of meeting national economies' and global objectives. This interest has led to a greater degree of regulation, monitoring and structuring of its provisions by external agencies. Further, global agencies such as the OECD, the World Bank and others often want to promote a particular view about vocational education and its means of enactment in those countries upon which they have leverage.

Such external influence has existed in other educational fields and is currently probably growing in those areas also. Now, as higher education engages increasingly in occupational-specific programmes (i.e. what has been referred to as higher vocational education), it too is becoming subject to greater external control and regulation. Programmes in universities associated with nurse and teacher education are subject to the requirements of local and national registering authorities. As well, there are now globally accepted frameworks that require universities offering Masters of Business Administration programmes to meet their requirements and be audited. This leads to a ranking system which directly influences universities' abilities to attract and level charges for fee-paying students in these programmes. Elsewhere, national and international rankings of universities and even schools within universities are becoming commonplace, meaning that the kinds of criteria adopted in these rankings become the bases towards which these institutions direct effort. Moreover, vocational education, like other forms of tertiary education relies upon the outcomes of what has occurred within primary and secondary education. Given the array of knowledge required for competent performance at work, most people will need to develop both the kinds of capacities that a more general education provides and the more specific understandings and skills needed to realise their vocations, either in paid work or some other form of activity. In sum, through this meander across the education terrain, it can be seen that there are a diverse

set of historical, cultural and situational factors that contribute to the complexity of the field and sector of vocational education. One of the abiding cultural factors is the standing of the occupations and that of the education provision that supports them.

Standing of Vocational Education

A distinctive quality of the vocational education field is the diversity of its standing. Contained within this field of education are provisions with both the highest and lowest standing and societal esteem. On the one hand, vocational education for the professions such as medicine, physiotherapy, law and commerce enjoys high status, is offered through prestigious universities and participated in by students with high academic achievement. On the other hand, some of the institutions and programmes in the vocational education sector are seen by many as having low status. For instance, in one country, the acronym for institute of technical education is disparagingly referred to as 'it's the end', i.e. ITE. These differences in status and standing are hardly surprising. They arise from the distinctiveness and massiveness of the knowledge required for different occupations, how particular occupations have been valued over a long period of time and how the rewards for particular occupations are distributed. So, for instance, medicine is a highly esteemed occupation and remunerated at a level above most other occupations. It provides secure employment in just about all countries except France, where there is more open entry than in most other countries, and is taught through prestigious universities, has tough entry requirements, and also offers articulation to specialist roles which are even more highly remunerated. This occupation is also often seen as comprising clean work which is more mental than manual. However, it is likely to be tough and demanding work as well. Conversely, many of the occupations served by the vocational education sector are commonly perceived to be the opposite of what has just been described. Moreover, given that much of vocational education sector comprises participation in low-level certificate programmes that do not always add to a recipient's value in the labour market and are highly regulated and controlled by sponsors, it is hardly surprising that they are viewed with low esteem. Cultural and historical legacies have positioned many of those occupations as being at the low end of desirable forms of employment, as is advanced in Chapter 4. Work which is seen to be more manual than mental is also seen to be less worthy than that which is more mental than manual. However, there remain ambiguities in such generalisations. For instance, orthopaedic surgeons engage in a lot of physical work, even though it does not carry the stigma of being a physical occupation. Further, some forms of physical work can be highly remunerative, such as those which involve work in coal mines or on oil drilling platforms, for instance.

Yet, within the broader public discourse there may well be quite consistent understandings about the status of occupations. Indeed, there are rankings of occupations in many countries, usually with the major professions at the top. There are also clear understandings about the levels of remuneration that occupations of

different standing receive. These status issues are quite profound as they shape how individuals view them, make decisions about them and consider educational provisions for them. For instance, since the 1940s, in most countries with a Western style advanced economy, the duration of medical training has hardly changed. However, through the same period, the period of training required to be a tradesperson has been reduced from 7 to 3 years in some countries (Choy, Bowman, Billett, & Wignall, 2007). So, whereas the knowledge required to become a doctor is seen to take a similar amount of time, the duration required to develop trade skills is seen to be able to be shortened. Part of this is an assault on the standing and conditions of trades workers that is unlikely to be exercised in the same ways against doctors. Indeed, there would be considerable resistance from the community if there were efforts to significantly shorten the duration of medical training, not the least being led by the doctors' professional associations. However, the arrangements for trade apprenticeships are perhaps more malleable and open to pressure in that they are associated with less social capital. It was reported by an employers' representative that it was possible to reduce trade training to 18 months, which was quickly followed by the qualification that such workers, however, could not be expected to be paid at a full trades workers' salary (Choy et al., 2007). Yet again, societal factors play out here. It would be less likely that this kind of action would be exercised as strongly in countries such as Switzerland or Germany where skills and skilled workers are valued, because of the '*berufskonzept*', the valuing of skilled work.

It is also important to acknowledge that the esteem of workers and workers' sense of self is not wholly captive to hierarchies of occupations that exist as societal facts (Noon & Blyton, 1997). This lack of capture is extremely important. If individuals who were not engaged in what is seen to be societally esteemed work were constantly aiming to secure that work, or felt they were insufficient because they were not doctors or astronauts, then there would be considerable instability in both economic and societal matters. Moreover, statements of societal esteem are likely to be potent in particular ways, which may be far from uniform. For instance, in specific communities, particular kinds of skills will always be highly valued. Hence, the skills of coalminers in coalmining communities (Somerville & Abrahamsson, 2003), farmers in farming communities (Allan, 2005) and the adaptable skills of car mechanics in small country towns mean that these occupations have reasonable status, far more so than some other occupations which might be seen as having higher social status (e.g. teachers). So, whilst there may well be broadly applicable indications of societal esteem about particular occupations, these may well be distorted or reshaped by local factors, or at particular points in time. For instance, people in mining communities earning huge salaries, living in company-subsidised accommodation and accessing subsidised food might question the sense of going to university to become a teacher who earns a fraction of what miners do and live in sub-standard accommodation in the same location. Individuals may well be more likely to use such local benchmarks of esteem in formulating their sense of self. For instance, in studies of young people becoming bakers it was these apprentices' relationships with the particular baking workplace which was the source of their sense of self, later to be replaced with the more abstract concept of being a baker

(Chan, 2009). Similarly, the standing of coalminers in a coalmining community can also be premised upon the kinds of occupational skills they have, as indeed can nursing.

Individuals will also make judgements about the worth of work and with what they want to identify. For instance, in a study on becoming a nurse, one of the student nurses was a mature woman who had formerly been a lawyer. However, having seen nurses caring for her dying parents, she came to see the value of nurses' work as being more important than what she did as a lawyer (Newton, Kelly, Kremser, Jolly, & Billett, 2009). Consequently, she became a student in order to learn about nursing through a university programme. So, beyond societal measures of esteem and worth, individuals will make their own judgements about the standing of the work they engage in and also what that work means for them. All of this is explored in greater detail in the next chapter (Chapter 3) that focuses on what constitutes vocations. The salient point here is that beyond social facts such as occupations' societal esteem at both a national (i.e. cultural) and local level, there is also the importance of the personal fact of how individuals engage with what is suggested by the social world (Billett, 2009b). Beyond social facts, issues of personal interest and assent are also powerful factors in how individuals engage with and learn through vocational education.

At a national level, the societal esteem of occupations are likely to be salient when decisions are made about provisions, resources, occupational certification and access to programmes preparing for occupations. This decision making extends to individuals selecting occupations including considering the benefits and costs of engaging in preparatory education programmes. There is evidence to suggest that this sentiment is backed up by fact in terms of the income-generating capacity of the various offerings within vocational education. Essentially, there is held to be a strong correlation between levels of educational awards (i.e. certification) and levels of remuneration that holders of qualifications receive (e.g. Sianesi, 2003). As discussed in Chapter 4, these arrangements arise through history and are parts of the cultural, societal, institutional norms and practices. As well, they are often linked to or aligned with the societal esteem that particular occupations enjoy. For instance, despite higher education becoming massified and increasingly common, it is likely to be seen as being inherently superior to the vocational education sector. Certainly, across countries there is far higher societal esteem for some occupations than in others. Nursing education for instance, in many countries, is undertaken within university programmes, while in others it is found within the vocational education system (i.e. sub-university-level institutions). Even in a country such as Germany, where skills, crafts and vocational education are held in higher esteem than in many others, it still runs below university preparation. Hillmert and Jacob (2002) suggest that in Germany the vocational education route is often taken because it provides a kind of educational insurance, in case the student is unable to complete a university education. Vocational education here is a fallback for young people who fail to secure entry to higher education.

So, there are a set of important factors that shape how vocational education is defined and characterised, supported and enacted globally, societally (i.e. nationally)

and within specific communities. Some of these are well established and have justified bases to these sentiments. However, others factors are more premised on societal mores and sentiments and these have particularly deleterious consequences for vocational education. These include enduring beliefs about the lack of complexity and demands for occupations that are not seen as prestigious and also assumptions about the capacities of those who perform such work. So when based upon measures of earning potential and cultural sentiments associated with the esteem directed towards particular occupations, the standing of vocational education programmes in schools and colleges will struggle to compare favourably with education provisions offered through universities (Kincheloe, 1995). However, high levels of personal and work-related satisfaction are not the prerogative of professional work. Consistently, across a range of occupations, workers articulate personal satisfaction and come to strongly identify with and take pride in their paid work activities (Noon & Blyton, 1997), even those that are sometimes of relatively low social standing such as age care (Somerville, 2003) or service work (Billett, Smith, & Barker, 2005). Certainly, the measures of occupational satisfaction and identity that arise from community, situational and personal considerations, all suggest the need to go beyond the societal esteem directed towards particular occupations and the salaries they attract to understand the worth of particular vocations, and the bases for individuals' participation and development in their working lives. Clearly, other factors associated with vocations, their learning and practice are at play here. Across its history, vocational education has been subject to the views and prejudices of socially privileged others whose contributions are often self-serving and ill informed. In particular, their views about the worth of work, those who conduct different kinds of work and the educational provisions they require have been serially injurious.

The dimensions of focus, standing and institutions referred to above shape a view of vocational education that has a clear project, clear purposes and also strong foundations and that all of these premises need to be based upon informed understanding rather than societal sentiments and cultural biases. That is, the requirements for different kinds of occupations, the capacities needed to meet those requirements, and the means by which they can be learnt are all informed by inquiry including the perspectives of those who practise. Having outlined something of the characteristics, scope and diversity of what constitutes vocational education as both a broad field and as a specific sector of education, it is necessary to advance the means by which it can be elaborated, evaluated and critiqued. In the following section, a set of premises are advanced through which such processes might proceed.

Premises

To provide coherence and clear focus for the case being made through this text about vocational education, a set of six premises are advanced that provide a platform for these discussions. These are the following: (i) all education should be vocational; (ii) vocational education is as important an educational sector as any other; (iii) most of what refers and applies to vocational education equally applies to higher education, which is more highly esteemed; (iv) both the general and occupationally

specific forms of educational purposes and focuses make particular contributions, rather than the latter being of less worth and importance than the former; (v) the views of societally privileged others have dominated discussions about the standing of many occupations and vocational education; and (vi) vocational education, like any other field, has a weakness and limitations.

All Educational Provision Should Aim to Be Vocational

Within contemporary, democratic and humanistic conceptions of society, all education should aim to be vocational. That is, it should be directed towards assisting individuals identify and realise their potential. Such a proposition is premised on four key bases. Firstly, educational provisions per se (i.e. school, college, university, community-based) should seek to assist individuals in identifying and realising the things that are important to them and their community: their vocations. In this way, helping individuals achieve their full potential and realise their personal goals and ambitions should be common to all fields and sectors of education across the life course. For instance, Rashdall (1924) suggests that the choosing of an occupation is the most important decision individuals will make. Hence, all forms of education should aim to assist individuals in achieving their vocations (i.e. their calling in life – the direction they wish to move in and the goals they wish to achieve), albeit in ways that serves their community (i.e. local community, family, nation and employer). So, when vocations are taken as being something that is important to individuals and also to their associates (Dewey, 1916), which they assent to and take as their own (Hansen, 1994), they are a central goal for all kinds and provisions of education, as proposed in Chapter 3 that follows. This proposition makes no distinction amongst the forms of education that are highly or less domain specific. Indeed, rather than suggesting that one or the other of these forms of education is of greater or lesser worth, both of these different types of domain-specific contributions play important roles in assisting individuals' engage effectively in society, in realising their personal goals, and also in understanding the bases by which such goals are likely to be achievable. However, it is hard to imagine significant and worthwhile activities (e.g. occupations) that do not require the capacities to be literate and numerate, to communicate with others and to be self directed, able to solve problems and work with other people, and have the capacity to reflect upon and be critical by degree. In this way, vocational education is no different from any other forms or fields of education.

Secondly, the exercise of vocations is closely aligned with individuals' participation in society and is thus generative of social good. Yet, as Rehm (1990) points out whereas a:

> . . . person who has a vocation is viewed positively and the person who finds a vocation is considered to be quite fortunate. In contrast, a person who enrols in a vocational track or course is granted less esteem than one who pursues an academic program. (p. 115)

That is, as well as assisting individuals realise their personal potential, there is an inherent democratic principle that individuals have the right to participate fully

in society, so as to be able to exercise their vocation fully (Halliday, 2004). Hence, assisting individuals develop the capacities to participate more fully in society through developing domain-specific and non-domain-specific capacities are inherently vocational.

Perhaps the most contentious and heated discussion arises around the degree by which education should have a flavour or emphasis associated with working life or specific occupations (Pring, 1995; Wall, 1967/1968). It seems that some commentators, although conceding the need for a specific occupational focus within courses preparing individuals for particular occupations, view this inclusion as degrading and debasing education and inherently limiting the development of those who study (Aronowitz & Giroux, 1985; Bowles & Gintis, 1976; Lewis, 1994; Lomas, 1997). However, in contrast to critiques about the reproductive and work-focused character of the vocational education sector and vocationalism in schools, rarely are there complaints about the specificity of educational purposes and provisions that lead graduates to become doctors, dentists, lawyers, or even sociologists, psychologists or philosophers, perhaps because the belief is that they already possess such capacities. Indeed, the very specific nature of courses in medicine, law, engineering, nursing, teaching and so on, seem to attract most criticism when they are perceived as not fully preparing students for a smooth and successful transition to specific instances of those very occupational practices. Wall (1967/1968) who is critical of vocational education that is overtly occupationally specific, nevertheless concedes that somebody pursuing an honours degree in philosophy for the purpose of pursuing a life dedicated to the study of that discipline is engaging in vocational education. Indeed, an apparent contradiction in the case for a liberal, rather than vocational, emphasis in education is that most advocates suggest that, unlike vocational education, a liberal education is for learning and knowledge related to its intrinsic worth and capacity to ennoble the mind and character of learners. That is, such ennoblement and development can only occur through the kind of content nominated as being suitable to a liberal education. Indeed, Oakeshott (1962) assigns very distinct values to the fact that this kind of education is concerned with the use and management of explanatory language, whereas vocational education is concerned with prescriptive language. This claim presumes that those engaged in occupational pursuits never need to challenge, remake or transform the knowledge of their occupation. However, this is what workers at all levels report doing constantly (Billett, 1994). It also suggests that ennoblement is restricted to these kinds of learning, rather than a sense of self and accomplishment that are frequently reported as an outcome of being competent within a particular occupation. Wall's argument holds that such ennoblement can only occur through engaging with specific forms of knowledge which are pre-specified as being appropriate for liberal education. This suggests that the only knowable and worthwhile human pursuits are to be found within those domains of knowledge nominated as being worthwhile by such scholars. In short, the contradiction here is that the very premises of a liberal education are illiberal.

Hence, this very pre-specification contradicts the liberal ideal and its partiality also questions its openness for human development of all kinds. Instead, the voice

here seems little different from the demands of industrialists or government who insist that certain forms of knowledge are privileged and need to be learnt. It is certainly unclear to what extent this liberal view seeks to engage with those who are positioned as learners to understand in what ways their knowledge might be ennobled and extended. There is also something slightly contradictory about individuals who hold secure and highly paid positions of employment and who possess societally privileged voices (i.e. tenured academics) advising that the education of others should not assist them in directly securing employment and developing a more privileged position within society, such as what they enjoy.

Thirdly, it is likely that realising one's vocation requires a combination of occupationally domain-specific learning and also the kinds of capacities that are not constrained to their application to a particular occupation or discipline. Although some commentators make much of distinctions between general education and occupational-specific forms of education with their allegedly wider or narrower purposes, most individuals rely upon both kinds of educational outcomes across their lifespan to realise their personal, community and occupational goals. Hence, educational outcomes that can be used across domains are as helpful and essential for the exercise of individual vocations as those which develop the specific kinds of capacities required to engage in a particular domain of activities (e.g. history, philosophy, paid employment, music). However, one without the other is likely to be unhelpful.

Fourthly, regardless of what kind of educational institution and level of prestige are associated with a particular occupation, most educational provisions prepare individuals for domain-specific activities of some kinds, and as such have similar kinds of purposes, structures and focuses. That is, whether music, philosophy, history or a particular occupation is the focus of the educational provision, the development of the conceptual, dispositional and procedural capacities associated with those activities is required to effectively perform in the targeted domain of activity. For instance, being task oriented and putting procedures before patient concerns and discomfort is viewed as being emblematic of poor nursing practice (White, 2002). Together, these forms of knowledge comprise the domains of knowledge required for that occupation and its particular application. Regardless of whether that domain is specific to an occupation or not, the educational purposes should be the same. That is, to assist individuals in exercising their capacities, to guide and direct them to activities to which they are most suited and to assist them in securing their vocations. So, the development of domain-specific concepts, procedures and allied dispositions are likely to be common to all sectors of education, and this development is directed towards securing individuals' engagement and interest.

Consequently, vocational education like other fields and forms of education should be primarily directed towards the same goal: individuals' vocations.

Vocational Education Is a Crucial Educational Field

A second premise is that the vocational education field is an important and worthwhile and essential educational field as any other, and should not be seen as being

inferior to other such fields (e.g. primary, secondary, higher). Most of the focuses of vocational education are absolutely central to human existence, development and what is taken as contemporary civilised life. Whether referring to capacities associated with caring for the health, shelter, sustenance, appearance, or logistical and information needs of communities, all of these are important facilities that both enable and sustain contemporary societies and the well-being of their individual members. Therefore, an educational provision that is focused on developing and sustaining occupational capacities is both central to societal purposes and worthy of appropriate acknowledgement, status and support. Yet, many accounts discussing vocational education from general or academic focuses take as their starting point that these latter forms of education are inherently more worthwhile platforms and proceed accordingly to discuss the worth and merits of vocational education. Often, vocational education is presented as the antithesis of general education, rather than being merely a different form of education. As Elias (1995) points out, many forms of liberal education have utilitarian vocational goals, claiming that universities have added internships and practicums to the liberal art studies to enhance the occupational value of these studies. He suggests that rather than unhelpful dichotomies, what is needed is a concept of liberal education that does not focuses on particular disciplines, such as the humanities. Instead, a concept of liberal education is where the educational focus is liberal and liberating for individuals to become free, intellectual, sensitive and skilful people. Elias (1995) also proposes that humanities can be taught deliberately, focusing on minute points of grammar, history and literature, and vocational subjects can be taught liberally in ways that lead to the learning of general principles and the cultural context in which work is situated.

This proposition seems salient, because in many countries, and at particular times, the provision of vocational education (i.e. as a form of education which prepares people for and sustains them in selected occupations) has held a lowly status. For instance, although there have long been extensive provisions of vocational education in the United States of America (e.g. Lee, 1938), it has never enjoyed the kind of standing that it has in northern Europe (Kincheloe, 1995). Yet, seemingly much of this preference is grounded in societal sentiment about particular kinds of work, and understandings of the kinds of occupations that offer good working conditions and high pay. For instance, Cho and Apple (1998) report how both parents and teachers dissuaded students from employment in the booming manufacturing sector in South Korea. This was against the intentions of a government programme that sought to enhance the profile of the sector to young Koreans to redress the limited numbers of workers interested in this kind of work. This sentiment exists despite the fact that manufacturing is a significant source of national and personal wealth in Korea. Of course, there are important exceptions. For instance, in some northern European countries such as Germany, Austria and Switzerland, there is an extensive and well-regarded vocational education sector that is supported not only by government and the public and private sectors but also a societal sentiment that the development of skilled work as trades workers and technicians are worthwhile pursuits. Moreover, very large portions of the school-leaving population attend these institutions.

Yet, as noted, even in Germany, there are clear distinctions between the standing of graduates from vocational education and the university sectors (Hillmert & Jacob, 2002). So, there will be enduring distinctions among different kinds of occupations and their relative worth and standing (Kincheloe, 1995), although that standing differs across time and place. Nevertheless, this sector of education enjoys high enrolments of students from all ages in some countries. For instance, it is estimated that 1 in 12 Australians participates in vocational education (National Centre for Vocational Education Research, 2010). Yet, the benefits of participating in this form of tertiary education, particularly at the lower level of qualifications and in programmes such as apprenticeships, are seen as being fewer than for academic and higher qualifications (Sianesi, 2003). However, over many millennia, vocational education in its various institutionalised forms has played a role in developing the very skills and capacities that societies need to be sustained and to develop further. Moreover, it is important to remember that many of the most prestigious courses in higher education are explicitly occupational specific. Also, it is claimed that in most instances when vocational education comes to have both general education and specific occupational purposes, it is unlikely to succeed (West & Steedman, 2003). Yet, when vocational education is seen as being an alternative for those who struggle with general education courses it is viewed with low esteem and as a poor option. These authors also suggest that, in the United Kingdom, trying to secure parity of esteem between programmes with a general and vocational educational is futile, given the apparently unassailable basis of its standing (Wolf, 2002).

However, there are also important educational processes to suggest that the provision of vocational education should be seen as being worthwhile as any other. Firstly, it has specific purposes that are distinct from other fields of education. Those already discussed here include the capacity to identify, develop and sustain sets of capacities through which individuals can conduct activities that society needs for its functioning and that also generate income, status and esteem for those who assent to them being there vocations. So, in terms of fulfilling social and personal needs, this field of education makes quite concrete social, economic and personal contributions. Secondly, the assumption that there are some forms of learning which are inherently adaptable and transferable has been questioned within cognitive studies in recent decades (Alexander & Judy, 1988; Gelman & Greeno, 1989). That is, it is likely that adaptable knowledge arises from domain-specific knowledge and situated instances and is then projected into other domains of activities and instances. So, regardless of whether the domain of activity is being literate, being able to compute, or perform other kinds of activities, these capacities are developed and exercised within domains of activities, not as inherently applicable capacities (Alexander & Judy, 1988). Consequently, the criticisms about generic competencies being without worth in the absence of a particular domain of knowledge (Beven, 1997) are equally applicable to claims about learning more generally. Indeed, it seems more likely that rather than highly adaptable strategic learning arising through general preparation that it is more likely to be that the most adaptive learning arises through highly specific procedures. For instance, the ability to use a keyboard and calculate are very specific capacities which are the very opposite of claims for adaptable knowledge

of a strategic kind arising through a general education. Yet, these are the kinds of capacities that are adaptable. The literature on expertise clearly indicates that expert performance is premised upon domain-specific knowledge, not general problem-solving strategies or heuristics that have very limited potential (Charness, 1989; Chi, Glaser, & Farr, 1982; Ericsson & Smith, 1991). Hence, rather than diminishing the standing of domain specificity this should be something more widely championed than when it occurs within a fancied or privileged set of activities. Instead, finding ways of contextualising and giving meaning to what is taught in the general curriculum through its application to domains of knowledge has become important for schools, colleges and universities (Voss, 1987). It is perhaps only through such an approach that these institutions can achieve the expectations of and promise for the broader adaptability or applicability of knowledge learned there. That is, to secure the adaptability of 'generally applicable knowledge', much effort is now being expended to engage with the very domain-specific activities that were seen to be antithetical to effective general education. So, alignments with more applicable domains of more specific (as in applications in work and working life) may do much to assist the goals of general education, in particular, finding applications beyond the circumstances where this knowledge has been learnt. It is these very applications that many universities now champion and boast about as they make claims about the relevance of their teaching and curriculum. That is, engaging their students with domains of knowledge to secure learning that is applicable beyond the circumstances of its learning.

Consequently, the worth of occupational-specific education is not inferior to that which claims to be generative of learning which is inherently more adaptive. Rather, just as domain specificity is valued in the learning of literature and mathematics, medicine and physiotherapy, sociology and philosophy, so too should it be valued more widely and within the entire range of human activities. Hence, provisions of vocational education are held to be as salient and worthwhile as any others.

Little Distinction Between Higher and Vocational Education

Following from the above, and thirdly, much of this discussion on the vocational education sector can also be applied to what occurs in higher education. In overview, there is little substantive qualitative delineation between occupations that are described as professional and those occupations that are the focus of vocational education systems. This is why they are proposed here as a part of a broad field of education: vocational education. That is, as noted above, all of these occupations, regardless of the institutions that are nominated to host their preparation have specific concepts, procedures and dispositions that need to be learnt. Certainly, the extent of a knowledge base is more or less massive across the range of occupations, but qualitatively there is little distinction in the goals for and processes of the provisions labelled higher and vocational education. Of course, the domains of knowledge for prestigious occupations are often characterised by a massiveness and complexity that may make them quite distinct (Winch, 2004a). However, even these

characteristics are not fixed; rather they reflect societal priorities and sentiments, and imperatives. For instance, Darrah (1996) has shown that the requirements for production workers in a computer factory can be as massive and complex as that required by the company's computer system designers. Moreover, changes in the forms of work can make it more complex and demanding, for example, the advent of technologically driven work processes that require high levels of symbolic knowledge (e.g. Martin & Scribner, 1991). A wide range of work has been shown to require similar demands to complex work tasks (Billett, 1994). Nevertheless, claims about similarity in purposes and processes across these two educational sectors may well be resisted, and even scoffed at.

One way to contest an easy dismissal of vocational education of being lesser than that occurring in higher education is to consider the distinctions between education and training. What is often suggested is that the vocational education sector is about training and the schools and universities are about education. According to Skilbeck et al. (1994), the distinctions between education and training are as follows:

> Education is a comprehensive term for purposive, structured human and social formation, governed by intellectual and ethical principles, directed at knowledge, understanding and their application and informed by the spirit of critical inquiry. (p. 3)
>
> Training is task specific but nevertheless, in our usage, a part of education and subject to the values, criteria and principles that govern educational processes generally even though as frequently used, its reference is to factual and unreflective knowledge. (p. 3)

Much of what occurs in the school, vocational education and higher education sectors has dimensions that can be described in both of these definitions. So, whether referring to students in schools learning calculations or grammar rules by rote, or medical students learning the names of the bones in the body or the student in an electrical course learning definitions and terms, much of this activity can be understood through the definition of training. Yet, in the same way, much of what is defined here as education also occurs in each of those provisions of education. Trades workers need to monitor and evaluate their performance (Stevenson, 1994) as they conduct tasks, and exercise the qualities that are captured in the definition of education. Indeed, rather than using these two processes (i.e. education and training) to delineate education sectors, they are more likely to be helpfully seen as existing in all forms of education, although training as defined here is a process utilised within the provision of education.

However, having such ideas accepted in the public discourse about vocational education is likely to be quite difficult. Inevitably, the measures used to appraise parity will favour those reflected in highly esteemed occupations (i.e. earning potential, societal esteem) rather than what occupations mean to the individuals who practise them. Perhaps, it is more productive to consider the qualities of the particular occupation and identify individuals whose interests and capacities are best aligned with particular occupations, rather than basing those on earning potential and societal esteem. For instance, it has been shown that the frequency with which practitioners in different categories of occupations need to engage in higher order thinking and

acting to fulfil non-routine problem solving is similar across a number of occupational categories, including the professions (Billett, 1994). Similarly, there are few qualitative distinctions between vocational education provisions as they are enacted in universities and in institutions within the vocational education sector. Indeed, the vocational education provisions that are increasingly becoming a central element of university programmes comprise specific preparation for those occupations, labelled professions.

Significantly, the standing and preparation for some occupations (e.g. nursing) drifts across both sectors and in different ways across countries. Yet, nurses are required to demonstrate the same canonical knowledge across countries such as Germany and Britain and the US, despite the former being prepared in both the vocational education system and higher education. That is, regardless of the institution that provides a preparation, there are canonical concepts, procedures and sentiments which are important to be learnt in order to practise them. This canonical knowledge is the focus of occupational preparation and ongoing development across what is labelled both professional and vocational education. Also, regardless of whether this education occurs in universities or in institutions within the vocational education sector, there are regulatory bodies or standards that need to be met through the provision of teaching and levels of achievement by students. So, the provision of professional preparation in higher education is shaped and constrained by external bodies as is often the case with the vocational education sector. Quantitatively, there may well be distinctions between the scope and depth of the occupational knowledge that is required in some occupation. Yet, the purposes and processes of educational provisions across higher and vocational education qualitatively do not differ greatly. Much, if not all of what applies to learning in the vocational education sector is equally applicable within higher education. Hence, increasingly higher education is being referred to as higher vocational education, often pejoratively.

However, possibly not all of the interests and capacities of individuals are best exercised and developed further through the selection of occupations that are currently being prepared for within higher education.

Both General and Specific Educational Provisions Are Salient

The fourth premise is that both what is referred to as domain-specific and capacities that are not specific to a particular domain of activities are required and necessary for adult life for a range of distinct purposes. Hence, both of these forms of knowledge should be considered within vocational education provisions. Yet, it seems wrong to assume that either one or the other is more important, because both are essential and in some ways interdependent. Domain-specific knowledge, such as that constituting the canonical and situational dimensions of occupational competence requires the capacities to communicate, get on with others, and have an understanding of and sensitivity towards cultural factors. Equally, the ability to communicate, be numerate and literate, and engage with others is all in some way shaped by the domain of activity in which they are applied. This is perhaps more the case

than is captured in the accounts of generic competence. Certainly, the development of occupational-specific knowledge and its ongoing development are essential for many of the provision of the services and goods that humans rely upon. Halliday (2004) suggests that the view that a liberal education is the best means of promoting individual autonomy is quite flawed. He questions whether such autonomy is likely to be developed through a focus on content that is divorced from its application. That is it needs to be connected to the kinds of contexts and circumstances in which individuals come to practise and exercise their autonomy. Workers employed in most forms of work need increasingly to be numerate and literate, be able to communicate effectively with those whom they work and whose needs they serve. Moreover, workers require a social sense of what is important and how to conduct themselves in their work roles, which becomes part of their sense of self. In addition, they also might come to experience personal empowerment and autonomy through having those capacities. Hence, more than simply technique or technical knowledge, this specific form of knowledge is important for the individual's development as both a person and a worker. Consequently, it is necessary for workers to have both kinds of preparation: that is, occupational-specific domains of knowledge and other capacities that are requirements for effective practice. It is quite possible to adapt a liberal educational view to the development of specific occupational capacities, as in vocational education (Halliday, 2004). The two are not distinct. Yet, no amount of general preparation would be sufficient for the conduct of a highly specialised occupational practice.

Certainly, nearly all forms of education are likely to become more specialised either through focus or a trajectory of study. Specialisations are entertained in all domains of human endeavour, including education, either in refinement or in focus. Progression in or higher degree studies in the most general of educational fields inevitably involve engaging increasingly in a more specific focus of study within a particular domain of knowledge. Through this very progression, an individual is engaged in identifying and preparing for the vocation (i.e. as something with which they wish to identify and direct their energies towards), albeit within fields of activities that attract higher or lower societal sentiment and which to a greater or lesser degree align with specific paid employment. Yet, this progression is underpinned by the both domain-specific capacities and also those that are not restricted to specific domains of activity, but instead need to engage interdependently with each other.

Socially Privileged 'Others' Influence the Standing of Occupations and Vocational Education

Throughout the development of the conceptions of occupations and vocational education, overwhelmingly, it is the views of others, often in powerful societal positions (i.e. social elites, religious leaders, industry spokespersons, bureaucrats, government agencies) that have shaped societal views about the different standing and characteristics of particular occupations and the provisions of learning for them (Kincheloe, 1995). Moreover, since early on, these socially privileged voices have also held

views about the capacities of individuals who work in occupations below the professions. From Plato onwards (and likely before), there has been a belief that these individuals have limited and fixed capacities (Lodge, 1947). Plato held that such work is enriched by the contributions of nature, not those who practised them, and that the capacity to innovate and adapt was beyond such workers who had to merely await divine intervention. This view continued until recent times and may persist in some quarters. For instance in the middle of the nineteenth century Stow (1847) made much of the national responsibility to raise the position of the poor and working classes, from 'their present state of ignorance'. He went on to make the case for state funding for this purpose:

> We have always advocated much government grants for the moral and intellectual training of the young, knowing that otherwise the people would never educate themselves, and that the private subscription of the wealthy would fail in providing required funds for that purpose. (Stow, 1847, p. 2)

The concern here is of course that it is others who are positioning themselves in a paternal role to speak on behalf of those they claim are best represented by themselves. Although sometimes used as a source of advice, rarely are those who actually practise the occupations that vocational education serves invited to participate in discussions about what should be learnt, for what purposes and by what means. Instead, it is often those who have not engaged in and practised vocational skills who are nominated as spokespersons for the occupations. Ironically, in contemporary times, as vocational education has become seen as being even more instrumental in securing national economic goals, those who practise are as increasingly viewed as being unqualified to contribute to and comment upon how this educational provision should proceed. That is, this decision making is too important to be left to such individuals. This decision making, instead, must be left to others whose understanding is held to be deeper and more worthwhile than those who practise. Yet, workers engaged in countless occupations have great depth of skill and understanding and nous associated with their occupation. Moreover, because they deal with new and non-routine activities frequently, they clearly have a range of capacities which includes profound problem-solving abilities which are necessarily premised upon higher orders of thinking and acting. Therefore, rather than positioning practitioners in this way, it is important to champion the richness of their practice and engage them in discussions about its development. Indeed, it is more than coincidental that where vocations and vocational education enjoy higher standing, organisations whose primary concern is to promote the standing and worth of the vocation, such as powerful professional associations, are also present. Hence, it is necessary to be critical of many of the voices who claim to speak authoritatively about occupations yet who have not practised them.

One of the key ways that socially privileged voices have influenced the consideration of vocational education is through a privileging of a liberal education over a vocational education. As is elaborated across this text, this privileging has its origins in ancient Greece, if not before, but has been carried forward by a range of socially privileged voices since that time, often seemingly more focused towards

maintaining the status of that form of education than through a reasoned, informed and evidenced case. Sanderson (1993) proposes five reasons why liberal education has higher status than vocational education. Firstly, the three areas of prized learning (i.e. classics, mathematics and philosophy) were established early as being what was required by cultivated minds, and these disciplines were offered through universities. Although claiming not to be pragmatic, being primarily concerned with human development of betterment, the capacity of the studies to train minds could itself be seen as being quite utilitarian. Secondly, exponents would be likely to see it as offering strategic capacities that sets apart those who possess them. This was a fairly inexpensive education provision which did not require extensive resources. Further to this, Sanderson (1993, p. 190) suggests that:

> The defence of cheap and useless liberal education was thus bound up with the best interests of college fellows in the defence of their financial and autonomous power status.

Thirdly, this form of education conveys the dignity of mystery which set those with it apart from others. Of course, it needs to be understood that until relatively recent times (i.e. the nineteenth century), large parts of the population had limited literacy, which inhibited their ability to utilise printed text, even if they could gain access to it. Fourthly, and building upon the previous point, it is suggested that this liberal education enjoyed key institutional support. For instance, many graduates from Oxford and Cambridge engaged in forms of employment (e.g. clergy, civil servants) which allowed them to sustain the form of education that had served them so well. Fifthly, in Britain, institutes of higher learning that offered technical courses were often in the north of the country and were derided by liberal universities in the south. Yet, elsewhere, these kinds of institutions, such as in France (Grande École, École Polytechnique, École Centrale), in Germany (Humboldt, Technische Hochschulen (now Universitaten)), Massachusetts Institute of Technology in America and the Institute of Technical Education in Switzerland, secured high status. Much of the worth of these kinds of institutions arose from their contributions to the industrialisation of economies and the growth in the importance of technology. Unlike in Britain, social crises in France and Germany arising from suffering military defeats did much to generate imperatives for technology and skill development (Sanderson, 1993). Similarly, it is suggested that the United States suffered from a lack of skilled labour, unlike the United Kingdom, and this led to a focus on skill development that was distinct in some ways from the British experience. So, imperatives in these countries did much to raise the value and importance associated with technology and skill development, and in these ways reviewed the development of occupational capacity as something more than merely an individual's personal gain (Roodhouse, 2007). They were focused on strategic national development.

The point here is that across history, socially privileged voices have done much to regulate the discourse about the standing of occupations, advance views about the individuals who undertake those occupations and the declines in forms of developmental processes and opportunities that should be advanced for these occupations. Yet, many of these voices were, and continue to be self-serving. They are

under-informed about the nature of skilled work and how it might best be learnt. Moreover, they have applied precepts which are quite questionable and proven to be ineffective with considerable confidence, rarely engaging with those who they claim to be assisting and whose interests they claim to be promoting (Billett, 2004).

However, having critiqued the liberal approach to education, it is also important that the provision of vocational education itself be critiqued. It has inherent and systemic qualities which are subject to reasoned and informed criticism and debate about its purposes and how these might be best realised.

Problems and Limitations with the Vocational Education Sector

However, despite the factors that seek to limit the effectiveness and standing of this sector there are a set of concerns which stand out as being significant problems and limitations for this sector.

Firstly, there is a concern that this sector of education merely reinforces or entrenches disadvantage. That is, those who engage with it are subject to a narrow and limiting educational experience. For instance, very early in the last century in America, Dubois (1902 cited in Elias (1995)) argued that this form of education was detrimental to the prospects for black Americans, because it positioned them with educational outcomes and with forms of employment that restricted their opportunities for progression. In particular, the emphasis on practical skills was linked to a form of narrow utilitarianism that has restricted educational outcomes (Dubois – Elias, 1995). Almost echoing the views from ancient Greece, influential voices were suggesting that a very specific form of vocational education provision would not only support but would assist the inevitable social stratification (Hyslop-Margison, 2001). It is claimed that David Snedden, as Commissioner for Education for Massachusetts, believed 80% of students would derive little or no benefit from academic subjects. Quite consistent with Platonic logic, he held that students from lower strata had an innate inability to understand abstract subject matter (Drost, 1967 cited in (Bellack, 1969)). Hence, because of this belief, he proposed that there was no point in providing such students with a comprehensive high school curriculum that included both occupational and work life preparation and general education, because it was a waste to provide the latter. Instead, they would be provided with specific occupational capacities, which in turn restricted the scope of their options for selecting more prestigious occupations such as trades. This was the very agenda that Dewey (1916) was arguing against. He believed quite the opposite was not only the case, but also that to deny the opportunity for development and advancement was inherently undemocratic and unfair. Thus, instead of having an educational provision, and particularly one provided by the state, for promoting social and economic justice as a principle of its organisation and enactment, corporate interests appear to have prevailed (Kincheloe, 1995).

So, without being overly sceptical and cynical, it is necessary to appraise vocational educational provisions to ensure that their underpinnings are not premised upon such sentiments. For instance, it has even been suggested that career education,

which is widely practised, can be little more than a device for monitoring and controlling individuals' progression (Halliday, 2004). Within all this is a concern that particular attributes are being assigned to those who participate in the vocational education sector and the kind of educational provisions that it comprises are shaped by perceptions about these attributes. That is, these individuals have an inherent lack of capacity and potential. Certainly, the evidence suggests that the benefits arising from participating in this sector of education are not always as great as those arising from other forms of education.

Consequently, and secondly, there are concerns that the long-term benefits from participating in the vocational education sector are not as great as those elsewhere. For instance, reasonably recent evidence suggests that the returns to individuals on their preparation through lower-level vocational qualifications and apprenticeships in the United Kingdom are very low and potentially non-existent (Sianesi, 2003). Certainly, compared with the benefits arising from success in school education and securing professional recognition and university degrees, the benefits from participating in the vocational education sector may be quite modest. Yet, for those who have not succeeded in compulsory education, or that compulsory education has not served well, vocational education can assist them in developing the capacities and the credentials to progress both educationally and economically. There is evidence that students moving from vocational education into higher education, rather than through the normal schooling route, do at least as well as their counterparts from schools (Moodie, 2008). Indeed, Sianesi (2003) provides some evidence that the attainment of vocational qualifications by those with poor school achievement records serves to elevate their level of income. Moreover, in at least some instances, the kind of acknowledgement of the contribution of vocational education to its graduates' learning is strong to the point of being powerful (National Centre for Vocational Education Research, 1997). Yet, in all of this it needs to be remembered that the kinds of remuneration provided by, and the standing of the occupations in which perhaps the majority of graduates from the vocational education sector are employed, are far lower than those which are realised by university graduates. That is, both the economic and societal benchmarks work against those who graduate from this educational sector.

Thirdly, and as noted across its history, vocational education has been subject to the views and prejudices of socially privileged others whose contributions are often self-serving and ill informed. In particular, their views about the worth of work, those who conduct different kinds of work and the educational provisions they require have been serially injurious. Moreover, because this educational sector is seen to be responsive to and a means to secure the state's social and economic goals, it is subject to constant intervention and regulation, leaving it vulnerable to criticisms from economists, politicians and educators, and blamed for issues that are beyond its possible control and influence. For instance, Elias (1995) has noted that in times of high unemployment, the sector is criticised for not training people for the skills required for the workforce, and in times of high employment of not preparing enough adequately skilled individuals. This vulnerability has seen it be subject to repeated interventions in some countries and decision making increasingly removed

from those who have expertise in education, and particularly vocational education. Instead, it becomes controlled by those outside the sector. As this sector of education is seen as being responsible for, or responsive to central concerns of powerful interests, it is held to be too important a business to be left to teachers and educational specialists. Instead, interests and voices from outside are given greater legitimacy and the ability to make decisions. The most famous debate within vocational education; that between Snedden and Dewey was more than conceptual and ideological, it engaged powerful economic interests, who sided with Sneeden (Gordon, 1999). Yet, often these decision makers lack an understanding of education and educational processes, let alone the knowledge required for work and how that might be developed (Billett, 2004). However, when the initiatives and reforms proposed by such decision makers fail to secure the kind of outcomes that they proposed for them, the blame is rarely directed towards the decision makers (i.e. the voice of industry), but towards those who organise and enact what has been mandated by such decision makers (e.g. teachers). Hence, cycles of increased regulation and control easily emerge from such arrangements (Kincheloe, 1995). Many of these seek to position the purposes and processes of this educational sector as being utilitarian and, frankly, unattractive to those who have other options.

It is perhaps not surprising that in the many countries where governments are instituting fees or debts associated with higher education, few, if any, extend this measure into the vocational education sector. Certainly, like dominance by any other body, the involvement of business and commerce in vocational education can of course distort its purposes and processes. This is perhaps no more the case than when business and commerce is given a leadership role of an education system yet, know little about the educational processes, as argued above. Yet, this critique needs be focused more upon government intervention, regulation and control than on vocational education which has become subjected to these focuses. While there is little doubt that the state has had an interest in vocational education since at least the times of ancient Greece, the state also has had a responsibility to ensure a balance of views and perspectives are engaged with and exercised in the formulation and implementation of vocational education programmes.

Fourthly, there is an educational antipathy towards the kinds of learning that are the focus of vocational education provisions. For instance, Adler's (1988 cited in Elias (1995)) claims that vocational education is education for the sake of earning and that it should be about learning rather than earning. There is often a curious, unreflective and contradictory element in these criticisms. For instance, why is it acceptable that learning to be an academic which can occur in educational institutions, is legitimate, yet other kinds of occupations are deemed not to be worthy of education? It is not at all clear why this kind of critique, or the kind from those who claim the inherent worth of a liberal education are so well sustained by individuals who have disciplinary-based knowledge and exercise that knowledge within a paid work context. Again, this might well be the voice of those who are societally privileged indicating what is good for others and other people's children. Principally, this antipathy is usually associated with it being the opposite of liberal education, taken as the standard by which all forms of education are to be measured. This standard

has a long and rich history and has been the basis by which vocational education has been seen to be of limited worth, legitimacy and, even, seen as not being educational by some. Yet, as Elias (1995) concluded that:

> . . . far from being exploitative, vocational education meets the needs of individuals to earn a living in society with the talents and capacities they possess. (p. 185)

He also points out that many forms of liberal education have utilitarian purposes. The example he uses is the use of internship practicums and liberal arts studies. Yet, as is discussed in this chapter, even the supposedly liberal focus of university education in Europe was directed towards specific occupational ends (Roodhouse, 2007): particularly those of clergy, teachers and public servants. The humanities constitutes a domain-specific body of knowledge, as much as others. Yet, because of privileged societal sentiments, these forms of knowledge are seen by some as being worthwhile and liberating studies, whereas those that allow individuals to realise their personal and social goals through paid employment are not.

Fifthly, but by no means least of all, there is an inevitable and ongoing contestation between those who provide and enact vocational educational programmes and the expectations of others. In particular, given that vocational education programmes are occupationally specific and the majority are about preparing individuals for occupational roles, there are likely to be strong and sometimes unreasonable expectations on the part of those who employ and of those who participate in them that the outcomes will fully meet the needs of the particular occupation and even the requirements of the particular workplace in which the worker is employed. This is seemingly a perennial problem for vocational education, and not one constrained by national boundaries. Long ago, Dietz (1938) illustrated this problem using quotes from two employers whose sentiments echo those often made in contemporary times.

> Employer A says '. . . sure I'm interested in what these young folk do in school, but I have to teach them all about their jobs, anyway, when they start to work.'
>
> Employer B – is '. . . very much worried about this whole education business. The schools are inefficient and generally do not fit the young people for particular jobs. I want the beginners who come to work for me trained to do my job efficiently from the start' he continues. 'I'm a big taxpayer in this town, and a big slice of taxes goes for schools. They ought to teach something useful'. (Dietz, 1938, p. 307)

Such expectations fluctuate in their demands and intensity. For instance, White (1985) reports that at a time of high employment and high economic activity, employers were wholly satisfied with whatever graduates they were able to get from the vocational education system. Moreover, they were quite uninterested in providing advice about how the programmes might be improved. Nevertheless, at times of less than full employment and when skilled workers are scarce, industry expresses its profound dissatisfaction with the quality and quantum of graduates from vocational education (Billett, 2004). Moreover, often their voice carries much weight with government and it seeks to reform and to modify provisions of vocational education to more closely meet the needs of the occupations, and even particular workplaces.

Positioning of Vocational Education

The premises advanced above provide some initial positioning of vocational education, including the different bases of its standing. Although qualitatively similar to what occurs in preparation courses for the more prestigious occupations within universities, the provision of vocational education occurring in schools and colleges is often dismissed as being lowly and narrowly utilitarian. This also appears to extend to views about those who practise them: that they are not sufficiently adaptable to contribute to the discussions about their occupation and how educational provisions for it should be organised. Consequently, others who are less informed speak on behalf of these practitioners. All of this limits the capacity of vocational education to make its full contribution as it is likely to suffer from this societally biased and constrained views of its worth. The impact of this view extends to the kinds of education processes and measures that others select for it (e.g. narrow behavioural objectives, modularised curriculum, narrow standards and performance and accountability measures). Even where arguments about an education-led basis for sustained economic growth are commonly accepted, there are unconvincing arguments about the lack of vocational education's value. Indeed, as this role becomes increasingly nationally centralised, it often results in the leadership of vocational education being vested with peak groups whose understanding of educational processes may be quite limited. In response to the often stated claim that educators do not understand business (e.g. Ghost, 2002), in itself a questionable claim, in vocational education, where many have had careers in commerce, educators might conclude that business does not understand the business of education (Billett, 2004).

Finally, beyond community and societal purposes in the provision of skilled workers and others' expectations of vocational education, this sector of education also has important purposes and roles in meeting individuals' needs. These include the possibility of overcoming earlier shortcoming in educational experiences or circumstances of birth. Vocational education offers provision of education that can be utilitarian in assisting personal development, advancement and transformation. These are obviously important forms of development because many if not most forms of work are becoming more demanding and likely to require high levels of skills and understanding rather than the opposite. Of course, the critics will say in what ways and on what bases? Certainly, if you take socially mandated measures alone, these bases may not be clear. However, the studies that have examined the everyday tasks of individuals in these kinds of occupations routinely conclude that the work being conducted requires an array of knowledge associated with the occupational tasks, understanding the requirements of particular practice and a range of capacities to evaluate performance, and plan and predict processes. Also, from the responses of those who have experienced vocational education's contributions to their development (i.e. what graduates say about it in review and its consequences for individuals over time), a view emerges that is in stark contrast to what is advanced by the voices of industry. For instance, graduates of vocational education programmes in Australia consistently report the worth of these provisions in

supporting their movement into the work force and progression within it (National Centre for Vocational Education Research, 1997). Through surveys conducted after students have completed their vocational education programme, these students have high praise for the educational provision they accessed, but reserve their highest praise for those who taught them.

Yet in all of this, the aim is not to offer an uncritical account of vocational education against its detractors and the views from other sectors. Rather, the goal is to identify the ways in which the distinct contributions of vocational education can be better understood and appraised.

Chapter 3
Vocations

The dominant vocation of all human beings at all times is living – intellectual and moral growth.
(Dewey, 1916, p. 310)

. . . . vocation does not imply a one-way subordination of the person to the practice. Vocation describes work that is fulfilling and meaningful to the individual, such that it helps to provide a sense of self, of personal identity.
(Hansen, 1994, p. 263)

Defining Vocations

This chapter discusses what comprises vocations – an obvious starting point given that they are the stated object of vocational education. In doing so, it proposes that vocations are personally founded and premised on individuals' interests and needs that arise through their personal histories or ontogenies, albeit shaped and bounded by both societal and brute factors. However, the sources, form and standing of individuals' vocations are shaped by social and institutional facts comprising the existence, standing, access to and boundaries around particular activities (e.g. occupations). As well, the brute facts of maturation (e.g. strength and reaction times) can shape and constrain the human capacities required to undertake those activities. However, ultimately vocations have personal meaning and purposes to which individuals have to assent. It is they that decide what constitutes their vocations. So, whilst what individuals are able to assent to are shaped by societal measures (e.g. opportunities to engage in particular work), vocations are products of individuals' experiences and interests, that are, in some ways, person dependent. Thus, the genesis of vocations is found in individuals' personal histories or ontogenies. It is through the negotiation between individuals' interests, capacities and intentions and what the social and brute worlds afford them that comprise their ontogenies that are central to the enactment of vocations as occupations, their remaking and transformation. This chapter on vocations may be seen as a precursor to the following chapter on occupations, whose genesis and forms are located in culture and history. However, here the focus is on individuals' vocations.

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Constituting and Defining Vocations

An account of vocational education necessarily needs to include a consideration of the purposes, traditions, practices and institutions that shape its stated object: vocations. The purposes which this field of education should be directed towards, the kinds of traditions that underpin those purposes and processes that are adopted by it, the kinds of practices utilised and the form and organisation of institutions that offer it should be directed to this object, as should the knowledge required to be developed by those who are learning (e.g. students, apprentices and workers) to meet those purposes. All of these considerations are important for identifying the concepts, purposes and considerations for vocational education. Therefore, before discussing these key elements of an education field, it is necessary to delineate, define and elaborate its stated object: vocations. This includes knowing how vocations pertain to the occupations that are the focus of much of individuals' and societies' needs within this form of education and how it can support individuals' engagement in, development and employability across their working lives. All of this is worthy of careful delineation and elaboration.

To engage in advancing a view about vocations per se, and their relationship to occupations, and how these might inform discussions about vocational education, is a task that has been attempted in two parts. Firstly, in this chapter, what constitutes vocations is discussed and elaborated, and then, in the next chapter, a consideration of occupations as vocations is advanced. Both vocations and occupations have personal, societal and brute dimensions. However, it is proposed that, vocations originate in and are transformed by personal histories, whereas occupations have their origins in historical and social forms. Consistent with what is argued throughout this text, while this chapter emphasises the personal character of vocations, it also recognises that they are embedded in and bounded by social, cultural and historical forms and contexts, as well as brute facts. Subsequently, in the next chapter although occupations are held as historical, cultural and social artefacts, the personal dimension of occupations as vocations is emphasised, since their continuity, remaking and transformation are shaped by the way that individuals engage with and enact them.

So, what constitutes vocations?

Vocations: Origins and Forms

The word vocation is derived from the Latin word *vocare* which refers to a call, summons or invitation to a particular way of life (Hansen, 1994). This original meaning is captured in one of the two ways that the term is currently used. These are referring either to (i) an occupation or (ii) as something which describes an individual's key interest or 'calling'. In the second sense, vocations include those activities to which individuals are drawn (Estola, Erkkilä, & Syrjälä, 2003) and sometimes 'called' (e.g. Dror, 1993), and can lead to lifelong fulfilment (Hansen, 1994). Making distinctions between these two usages is fundamental to the project of vocational

education as they are both central to its purposes and practices, albeit in quite distinct ways. For instance, those emphasising the conception of vocations as occupations might promote vocational education as being primarily directed towards supporting the faithful reproduction and exercise of socially mandated roles, practices and historically derived techniques, such as those required for paid employment in a specific form of work. Alternatively, those that emphasise something individuals are called to (e.g. religious orders and teaching) also suggest a strong press of the social world. In contemporary terms, vocation as occupation is often used to suggest that vocational education needs to be highly responsive to industry expectation and standards, and employers' needs, often supported by government interest in such economic imperatives. This is particularly the case when there are national skill shortages or, conversely, high levels of unemployment, particularly youth unemployment (Aldrich, 1994; Anderson, 1997, 1998; Butler, 2000; Kantor, 1986). At these times, vocational education is seen as being primarily about providing an effective preparation and smooth transition for students into the occupational practices of the kinds needed in the community. Hence, in this conception of vocational education, it is mainly concerned with developing the capacities required for particular forms of work (i.e. occupations) that need to be undertaken and in ways that meet societal needs (i.e. demand for skilled labour). As such, its purposes, form and key endorsements are found in and are a product of society: institutional facts as Searle (1995) refers to them.

Alternatively, vocations can be seen as an individual's journey, calling or personal trajectory (e.g. Dewey, 1916). That is, something which is essentially a personal phenomenon that energises and directs individuals' intentions, activities and interactions (Estola et al., 2003), albeit shaped by external factors, such as a calling to a particular occupation. This second view also accounts for the process of learning, being a person-dependent process. From this perspective, vocational education can be seen as needing to focus on securing individuals' personal goals and pathways of development to assist them in engaging in education in ways that realise their fullest potential and also their aspirations. Here, vocational education is directed to understanding individuals' interests and capacities. Thus, it comprises an education to assist individuals in identifying their calling or vocation and to then assist them in realising their vocational goals. However, this conception also refers to the relations between the personal and the social world. The fact that individuals can find meaning in a socially constructed and culturally derived role – an occupation, either paid or unpaid, indicates a relationship with a social world. Hence, while this conception of vocations emphasises personal construction, it is firmly related to the social world. It is not asocial. From this perspective, an educational provision that seeks to develop an individual's vocation likely needs to go beyond a consideration of just self. A qualification often demanded by Dewey (1916) and Hansen (1994) amongst others is that a vocation has social as well as personal worth.

The privileging of one or the other of the two views of vocations set out above has changed over time. As is discussed in the next chapter on occupations, the standing of particular occupations has changed over time due to transforming societal values and imperatives. One of the key considerations for the concept of vocations is the

relationship between the person and the society: whether their worth is located in the activities that societies mandate for them, or those that individuals find interesting and meaningful. Of course, the ability to engage in what individuals find worthwhile has been transformed across time as opportunities for engagement have become more open. That is, earlier the choices of occupation and the means by which they were distributed in terms of class, gender, race and so on were far more constrained than they are in contemporary times, though in some circumstances this is perpetuated. Yet, beyond this change, there have also been transformations in views about the position of self and society.

The distinctions between modern societies with pre-modern societies include how the relationship between self and society is conceptualised (Quicke, 1999). Both Meade (1913) and Dewey (1938) distinguished between conduct in traditional societies where moral compulsion did not come from the individual but 'impressed' itself upon the individual from external force as custom was strictly adhered to. However, in modern societies although individuals are more aware of their own agency, this does not exclude the influence of, or need to, engage with the social world. Yet, emphasising the relational interdependence between the individuals and society, Quicke (1999) also suggests the self, in modernity, is more social because it requires the individual to understand the role of others and society, and in this way individuals have necessarily become more reflexive. What this claim suggests is that in pre-modern societies people were not as reflexive as they are in modern societies. It also suggests that the current conception of the work ethic, interest in work and the increased emphasis on an individual's sense of vocation as a personal construct is not just associated with the rise of capitalism, but has its genesis in earlier links with religious belief and values. In this earlier conception, an individual's work and worth were judged against its moral significance as 'holy business' (Quicke, 1999).

Garrison (1990) also suggests that positivism of progressivism leaned towards the view that there is a mind-independent reality. Proposing a mind-independent reality led to a sharper separation between the knower and the known; mind and body; theory and fact; value and fact; and subject and object. Such a distinction inevitably positions the person as being not only separate from, but in a different kind of relationship with the social world than when it is an imposition of the social upon the individual. Understanding, in the earlier view, arose only when the mind had correspondence with external reality by appropriate inductive methods. Then, human progress lay in obeying these objective principles. In sharp distinction to these kinds of views, Dewey's philosophy of science, for instance, was more associated with individual learning through inquiry. Garrison (1990) proposes that for Dewey, all thinking was a process of continuous, never-ending inquiry. Dewey believed that one learnt a vocation through an occupation, for instance. Continuing enquiry is necessary to solve the problems that individuals face across their life history. Intelligence provides the power to intercede on one's own behalf upon the unsubtle and often uncaring course of events by introducing one's ends and then seeking means for achieving them. All reasoning, all inquiry was for Dewey means–ends reasoning. Dewey's theory of inquiry was at the centre of his pragmatic philosophy. For a pragmatist, like Dewey, as opposed to that of a positivist,

science is supreme not only because it yields certain 'truth', but rather because it results in systematically correctable and improvable conjectures. Dewey was a radical empiricist: somebody who believes that all empirical claims are hypothetical, indeterminate and inexact, and, therefore, always open for revision as result of further inquiry. Ultimately, within such a view, objectivity was intersubjectivity and nothing developed intersubjective understanding better than democracy did (Garrison, 1990, p. 396). What can be seen here is that what directs and motivates individuals' thinking and acting is central to their engagement in tasks and how they make decisions about and participate in work and working life.

Of course, there is a range of variations between such conceptions of vocations either as occupations or as personal trajectories, and with subsequent consequences for vocational education. Certainly, through ultimately considering occupations as vocations, these conceptions can be reconciled. It is proposed here that efforts to conceptualise vocations should largely focus upon the second of these meanings, and to differentiate them from, but relate them to occupations. That is, vocations are something that emphasises individuals' personal interests, trajectories and aspirations, which may be, but are not restricted to, their occupations. Moreover, this conception can include an engagement with occupations as a practice that is primarily societally sourced and circumscribed, and possibly bounded by social forms and practices (e.g. entry requirements), yet acknowledges interdependence between personal interests, aspirations and trajectories (i.e. vocations) and occupations. For instance, the conception of vocations adopted here holds that individuals' interests, agency and capacities are essential to their assent to the learning of, remaking and bringing about transformations in practices, such as in paid work. For instance, Green (1968) distinguishes between a job and work. A job is something someone does to make a living, whereas work is an activity in which one finds identity, meaning, worth or sense of achievement. Here, what is proposed is that what Green refers to as a job is equated to an occupation and what he refers to as work constitutes an individual's vocation.

This perspective both acknowledges and accommodates the idea that tasks that are meaningful to individuals and their communities often arise from the social world. But individuals' vocations are also shaped by brute facts: the influence of the natural world. Institutional facts (Searle, 1995) are those that arise through human needs and organisation and over time, and are shaped and valued by societal and cultural preference. Brute facts are those that arise through nature, which also might constitute a vocation, but also individuals' engagement in them (Searle, 1995). While most accounts emphasise vocations as arising from institutional facts, they can also be generated and also shaped by brute facts, as is discussed below.

From the view advanced here, vocational education needs to include informing, guiding and supporting individuals' selection of their occupation, and to do so in ways that meets their needs, capacities and aspirations: their vocation. As Gascoigne (1820) stated much earlier:

> ... [I] steadily pursued my vocation to which my mind was strongly attached by inclination and early habits. (p. 3)

This view of vocations also positions learners as being active meaning makers and as agents for remaking and transforming practices that are societally derived (i.e. arising through history and cultural need). This is because such practices are enacted through interests and intentions that are personally purposeful and focused, and through their enactment are remade and potentially transformed (Billett et al., 2005). Moreover, given the emerging and constant challenges of contemporary life, such as the transforming and churning requirements for work activities, learners, in seeking to realise and sustain their vocations, need capacities to adapt to change and to effectively manage occupational and workplace transitions. This more personally premised account of vocations does not deny the importance and standing of knowledge and practices that have developed over time (e.g. occupational practice), but is explicit in its acknowledgement of the crucial role of those who participate in such practices at particular moments in time, circumstances and when responding to specific tasks. Most importantly, only individuals can assent to what constitutes their vocations, not others.

Having proposed this emphasis on the personal, a qualification is required: what individuals are able to assent to may be constrained by opportunities for them to engage in preferred practices. As well, some activities hold far higher esteem in the community than others and it may be these that individuals want to assent to. Personal assent may be premised on social facts or at least mediated by them. Also, through their active engagement, those who practise the vocation will continue (i.e. remake) and transform these practices, thereby extending or reshaping them, potentially in ways that are helpful to both individuals and the community which has generated and sustained them. Hence, rather than merely implementing practices, practitioners' engagement in them is likely to involve an active process of continuity of that practice through remaking or transforming them as they engage in activities and respond to particular goals (Billett et al., 2005). Although individuals' needs are served by such practices, those practices are also served by their purposeful and intentional engagement in socially situated practices through which their continuity and/or transformation is secured. Hence, there is interdependence between individuals' vocations and societally manifested occupational concepts and practices.

This interdependence is something negotiated between personal imperatives, social forms and brute facts in specific circumstances and at particular moments in time. Through these negotiations, individuals' construe and construct what they experience in the social world in particular and, perhaps, unique ways (Archer, 2000; Valsiner, 2000). This learning encompasses dispositional aspects, including the formation of identity and sense of self. That is, what individuals 'call themselves'. Importantly, and in contrast to earlier conceptions, the personal is not simply subsumed by the social world. Certainly, the social world cannot be denied. But, it is also individuals and their particular contributions that come to shape their experiencing and enactment of these socially generated activities. To emphasise the scope and agency of the personal, and why it is necessary to view it as being central to individuals' vocations, Higgins (2005) refers to Dewey's example of a small room with little more than a telescope in it. To a brute realist, the room seems relatively barren

and constricted; but to the astronomer who lives there, it opens up onto the entire universe. The point here is that an individual's particular capacities and competence not only construe and construct what is afforded by the social and brute world, but also augment and extend those contributions, and in ways shaped by personal interests and capacities. Individuals are not wholly bound either by institutional facts and are able to negotiate with some aspects of brute facts (Church, Bascia, & Shragge, 2008).

Hence, the conception of vocation:

> . . . does not imply a one-way subordination of the person to the practice. Vocation describes work that is fulfilling and meaningful to the individual, such that it helps to provide a sense of self, of personal identity. (Hansen, 1994, p. 263)

This view also emphasises the role of personal agency within vocations. Because vocations are central to individuals' purposes and sense of self, they are likely to be engaged with and enacted in ways that are far more agentic than those activities that individuals do not assent to being their vocations. Hence, self and subjectivity are emphasised here, and in ways that emphasise agency as not being unbridled personal determinism but rather having a reflective element. As Hofstadter (1967) cited in (Heidegger, 1975, p. 174) proposes:

> Subjectivity is, first, will, impulse, blind thrust towards existence: secondly, it is will limited and controlled by itself through the understanding which develops for the purpose of controlling itself.

Capturing crisply this consideration of agency, he suggests 'spirit is subjectivity in search of truth of its being' (p. 174). This alignment between what it means to be worthwhile for an individual through active engagement is a powerful element of vocations and has very direct implications for vocational education. The degree by which individuals engage and respond to what they experience is likely to be commensurate with what they learn from it, particularly given the important role of their meaning making. Hence, because educational provisions are nothing more or less than invitations to change, how individuals take up of that invitation is central to how vocational education proceeds and what is learnt through its provisions. Dewey (1916) made the importance of both personal agency and its purposeful enactment a defining consideration for his concept of vocations. He noted in reference to careers that:

> The opposite of a career is neither leisure nor culture, but aimlessness, capriciousness, the absence of cumulative achievement in experience, on the personal side, and idle display and parasitic dependence upon others, on the social side. (Dewey, 1916, p. 452)

In a similarly way, Rousseau in his novel, *Emile*, advances the importance of industrial arts (Boyd, 1956). He proposes that 'man in society is bound to work, rich or poor, weak or strong, every idler is a thief' (p. 85). Similarly, Frankena (1976) notes that there are both utilitarian and moral goods associated with having a vocation. The former are about realising personal worth through promoting social well-being (i.e. doing things that are of service of others) and, the latter include not being dependent upon others and, moreover, contributing one's fair share to one's community.

So, as illustrated in both the quotes heading this chapter and those above, the social and personal are reflected in particular and interdependent ways within accounts of what constitutes vocations. Therefore, to provide both a platform and starting point for discussions that follow, a vocation is defined here as being:

> personally directed and assented but often socially derived practices, that reflect an individual's enduring aspirations and interests, and are usually manifested in culturally and historically derived activities that may carry worth for both the individual and their community.

In elaborating this definition of vocations, both its personal and social elements are advanced first. This starting point is used to build a case which proposes that the social and personal are interdependent within conceptions of vocations. Building upon this premise, the next section proposes that in understanding what constitutes a vocation emphasising either the individual or the social has a cost of denying the interdependence between them.

Vocations: Personal and Social Dimensions

As defined above, vocations include elements, purposes and imperatives of both the social and personal. Like Dror (1993), Hansen (1994, p. 266) proposes that 'a vocation describes work that has social value and that provides enduring personal meaning'. In doing so, Hansen emphasises the relations between personal and social factors. Here, she also advances vocations as a concept that is broadly applicable and whose purchase extends well beyond paid employment to include work within the family, community and society. Being a parent, a gardener, a stamp collector, a historian, a church congregation member, a cook and so on are socially derived activities that are important for communities. They will also sometimes be important to those who practise them, and some will maintain an enduring interest in them. These activities can all comprise instances of vocations that are not usually directly remunerated, as in paid work. Nevertheless, these activities can often comprise individuals' key vocations (Dewey, 1916).

Vocations such as these, like occupations, arise as an expression of cultural need, and transform over time as these needs change. They are manifested in a particular way in specific circumstances, including particular moments in time. For instance, being a parent to an adolescent child in contemporary times is likely to be distinct in some ways from those of much earlier times (e.g. managing their children's access to the Internet). Hence, this conception of vocations emphasises particular sets of personally engaging practices that exist because of social or institutional facts. Indeed, earlier definitions are often associated with vocations as 'a calling', whose qualities were proposed as being of service to others and engaging in particular ways of life, sometimes to the exclusion of financial reward (Dror, 1993; Hansen, 1994), for instance, those who become nuns or monks and make vows of poverty. However, some callings were often hard to avoid or resist and individuals were pressed into engagement, as circumscribed by institutional facts: those of society. Two distinct

and contradictory legacies arising from this social–personal press are that, on the one hand, this sense of vocation may well assist or buoy workers when coping with difficult tasks or the unremitting nature of difficult work (Estola et al., 2003), whilst, on the other, it may inhibit workers from protesting about such conditions. For instance, healthcare workers may be buoyed by the belief that they are helping people in their work, especially when it is difficult or unpleasant. Yet, they may also be reluctant to take industrial action because they do not want to leave their patients without care, or be perceived as being uncaring. Whether referring to military service, that within religious orders, or the kinds of work that were mandated to an individual through their birthright (i.e. the family's occupation) or their gender (e.g. access to particular kinds of activities), or quite simply the possible range of options available to individuals, the boundaries proscribed by society have made such callings difficult to resist (e.g. gendering of occupations). Indeed, across human history, the vast majority of individuals have had little choice about the range of options that were available to them. Yet, whilst limiting their options and constraining their choices, these forced callings would be likely to become individuals' vocations only when they found or developed enduring interest in them.

Conversely, this concept of 'calling' also extends to include the kinds of activities that individuals are attracted to (i.e. have a calling for), which could be religious, communal or social in their purposes or comprise their preference for and selection of a particular kind of paid employment (Estola et al., 2003). Even when seen as a divine gift, a calling would only have worth insofar as it served a common good (Rehm, 1990). Such interest may be shaped by institutional facts. However, whilst a vocation can be sanctioned by others (e.g. society or deities), the qualification is how individuals conduct their vocations. Callings from the social world may not always convert to individuals' vocations. In recent research on nursing, many students nurses reported having a long-standing interest in becoming a nurse, and could not always articulate why that was the case or where that interest arose (Newton et al., 2009). Perhaps, the subtle social sentiment that aligns women with caring and nurturing roles (i.e. socially worthwhile work undertaken by caring people), such as nursing, leads to this suggestion for a particular occupation as being seemingly a personal preference, when it is largely socially derived. Yet, such suggestions often fail to convert into these students' vocations as indicated by the high level of attrition in women in nursing roles, and also those such as hairdressing that are similarly gendered. That is, the reality of these forms of employment, rather than their projected ideal leads to dissatisfaction. Moreover, as noted, there has to be personal assent to activities that individuals nominate as their vocations. Indeed, Dewey (1916), using the example of galley slaves, goes on to say that individuals trapped in uncongenial callings is waste of human effort. Here, Rashdall (1924) also concurs:

> It is morally as well as socially desirable that there should be a great liberty of choice as to the particular way and as to the extent to which [one] will contribute to social good; [though] that liberty of choice is conditioned by the duty . . . of adopting the vocation to which upon a further review of all circumstances, internal and external, and believes himself to be called. (p. 136)

Ultimately, the personal dimension is the most central to what constitutes vocations, albeit this dimension is bounded by what is societally permissible. Whilst others may suggest, prompt and even force individuals into engaging in activities, these will only become their vocations if and when they consent to them being so. As Foucault (1986) suggests, no amount of surveillance and control can suppress individuals' desires. Moreover, Wertsch (1998) refers to the process of mastery in which individuals enact activities to the degree that meets the standards of those who might monitor and control them. Yet, these individuals remain unconvinced about and uncommitted to those activities. He contrasts this process of mastery with appropriation, in which individuals actively and enthusiastically take up (i.e. learn from) what they experience. This assent and engagement delineates difference between the paid work that individuals might do because they have to and those which are nominated as the kind of work that comprises their vocations. In all, individuals' perspectives, interests and engagement are central to what constitutes a vocation, including what they are drawn towards (their calling), and in the ways that they engage in learning more about, and for, that vocation. This is the manifestation that Dewey emphasises.

> The dominant vocation of all human beings at all times is living – intellectual and moral growth. (Dewey, 1916, p. 310)

In this way, vocations cannot be seen as being societally imposed, only shaped. Indeed, the concept of vocation as a personal practice although referred to earlier as callings, emerges most strongly in more recent theorising (Dror, 1993; Hansen, 1994; Rehm, 1990). Moreover, and as acknowledged far earlier, for Luther, the principal task for individuals was to have good personal motives and qualities when enacting their vocation, and this was its key distinguishing feature.

> It is always necessary that the substance or person himself be good before there can be any good works, and that good work follow and proceed from the good person . . . his works do not make him good or wicked, but he himself makes his works either good or wicked. (Luther cited as seen in Dillenberger, 1961, p. 70 in (Rehm, 1990))

Here, Luther emphasises that the qualities which make the exercise of a vocation virtuous are not the work that individuals engage in, but rather how they go about that work. Although their work may have particular societal standing or esteem, ultimately it is how they are enacted that is central to their virtue and worth. It is the personal qualities that stand to define not only vocations but also what constitutes worthwhile vocations. Dewey (1916) goes a little further in emphasising the significance of these personal dimensions, emphasising that they comprise the bases for and enactment of vocations. In essence, he holds that the person is the embodiment of vocations, and the societal standing and esteem of the work individuals engage in is less important than the significance they have for individuals. Yet, more than being of benefit to the individual, their vocations also require a social utility.

> A vocation means nothing but such direction in life activities as render them perceptibly significant to a person, because of the consequences they accomplish, and are also useful to his [sic] associates. . . . It includes the development of artistic capacity of any kind, of special scientific ability, of effective citizenship, as well as professional and business occupations, to say nothing of mechanical labor or engagement in gainful pursuits. (Dewey, 1916, p. 307)

Hence, what characterises individuals' vocations is premised in the worth of and interest to them and their associates of the activities that they nominate as their vocation, not its societal standing. This sentiment was proposed earlier by Aristotle who viewed the worth of human actions in terms of both the individual and their community (cited in Morrison, 2001, p. 231). Similarly, Frankena (1976) proposes the highest good aimed to be at is the public good. These personal qualities both shape and are shaped by how individuals engage with their activities and direct their energies whether in their paid occupation, hobbies or community activities. Hence, most importantly, what constitutes a vocation is not primarily premised on a societal sentiment about the worth of particular activities, but what they mean to the individual, albeit with reference to others. The point here is that what is perceptibly an individual's vocation should not come at a cost to their associates. Moreover, the emphasis Dewey (1916) places on the individual as an essential element of vocations is extended into how these emerge and are transformed across individuals' lives. He proposes that the particular meanings of vocations and their pertinence to individuals will arise over time and in different ways at particular points in their lives, for instance, on becoming a parent. Moreover, to emphasise the sovereignty of the individual in these negotiations, Dewey (1916) also claims that in contrast to the singular conception of individuals having an occupation, he proposes they are likely to simultaneously have a number of vocations (e.g. parenthood, occupation and hobbies), and they act to balance their interest in, profits from and agency across these different vocations.

> We must avoid not only limitation of conception of vocational to the occupations where immediately tangible commodities are produced, but also the notion that vocations are distributed in an exclusive way, one and only one to each person. (Dewey, 1916, p. 307)

So, at any point in their lives, individuals engage in diverse vocations as part of their life project, many of them are the unpaid kind (Higgins, 2005). In this way, vocations are positioned as being an overall set of activities that individuals engage in, one of which may be a paid occupation. Frankena (1976) takes this consideration of having more than one vocation implies there may be a hierarchy. That is, he proposes that there are super-vocations which stand as sets of personal goals and intentions, and then vocations that offer a means by which individuals are able to fulfil their super-vocation. In fact, what he refers to as vocations might be taken as just occupations and suggests that, from the individual's perspective, occupations are a subset of vocations. Indeed, this association with vocations leads us to what we call ourselves as, for instance, a worker, a parent, a family member and member of communities or groups that have particular forms and identities with which we wish to associate. It is these associations that collectively shape how our sense of self emerges and is likely to transform and how we elect to engage with, negotiate and value in the social world beyond us across our life histories. Moreover, the fact that the particular constellation of vocations arises from personal interests and circumstances emphasises the centrality of their person dependence. Similarly, Dewey (1916) encompasses within the concept of vocation any well-defined social role. Against the criticism that such a concept seeks to trivialise what constitutes

vocations, he counters, that just because individuals engage in a particular activity it does not mean it is or has to be their vocation. For instance, not everybody employed as a doctor has medicine as their vocation. Moreover, what is perceived to be worthwhile within society ebbs and flows, as circumstances change. The occupation or pursuit that is seen as highly prestigious in one era (e.g. weaver, fletcher and wool classer) may be far less so in another.

All of this suggests that although the social world shapes the parameters for what constitutes a vocation (i.e. what an individual is called for or called to undertake) and the standing of those vocations, the sovereignty of what constitutes vocations resides with individuals. Nevertheless, it is most likely that the nature of these callings and their roles has their origins in the world beyond the individual: the social or brute world. That is, the kinds of activities that warrant becoming our vocations are likely to arise through either institutional or brute facts (Searle, 1995).

The Valuing of Vocations

As noted, Dewey (1916) suggests we take a view of vocations that is unencumbered by sentiments that seek to make unnecessary distinctions between different types of activities. That is, we should not be persuaded by powerful or fashionable interests in making judgements about their worth. Instead, their worth should be seen in terms of their appropriateness to individuals that take them as their vocations and their worth to the community in which they are enacted. Certainly, Dewey (1916) was guided by a concern about social responsibility and an approach to education that contested the demands of powerful industrialists and those doing their bidding. This view focused on both social and personal worth, not on just the extent of the knowledge required to perform the activity. Higgins (2005) suggests that Dewey teaches us to be wary of callings that might lull us into conventionalised and routine consciousness.

> Every person shall be occupied in something which makes the lives of others better worth living, and which accordingly makes the ties which binds persons together more perceptible – which breaks down the barriers of distance between them. It denotes a state of affairs in which the interests of each in his work is uncoerced and intelligent: based on its congeniality to his own aptitudes. (cited as seen Dewey, 1916, p. 316)

From this discussion of vocations, we are invited to conceptualise them in a broad and personally inclusive way, albeit being derived through engagements and negotiations with the brute or social world. Just as being a hairdresser is a vocation, so is being a parent. So too can be being a doctor, a teacher or a classical scholar. Although there are socially derived occupational categories, such as trades, professions, semi-skilled or leisure that reflect certain socially privileged interests, historical alignments or affiliations, these categorisations comprise nothing more or less than the normative suggestion of the social world and the worth of particular activities at a specific point in time. Indeed, as advanced in the next chapter, the portrayal of particular occupations, such as trades, by socially privileged voices

has been to characterise them as being primarily about routineness and simple productions. Other vocations, such as those whose preparations are undertaken in universities are often portrayed as activities of a higher kind and inherently more esteemed kind (e.g. professions). Of course, and, with significant justification, particular kinds of occupations (e.g. medicine) require a profoundness, massiveness and criticality of knowledge and practices that warrant a particular kind of status and a lengthy and intense process of preparation. However, such a justification is premised on a different set of considerations than those used to make distinctions among particular kinds of activities as vocations. Certainly, the importance of avoiding vocations as vanity is essential. Instead, they reflect societal preferences that have arisen over time, and are not easily open to contestation, because any field of human endeavour can be encompassed by a massiveness of knowledge about it. Any particular topic can be richly elaborated. Yet, some topics serve particular and urgent social purposes that make their practice, knowledge and its acquisition a key priority. Yet, even for those engaged in the most prestigious of occupations, unless they assent to it being their vocation, it will remain nothing other than their occupation.

Others are concerned about giving up the personal to the social, through engagement in vocations which ultimately are harmful to the individual. Palmer (2000) argues that vocation as a calling that suggests growth into an authentic self needs to be achieved more than through work alone, though work is the central component of the consideration. Similarly, Winch (2004a) claims that although there are debates about the amount of time that we work, nevertheless, we want work to be worthwhile, not just in the rewards that it brings us, but also in the intrinsic satisfaction that comes from doing something we see as being valuable. Yet, for critics of individualisation, such as Bauman (1998), the notion of finding an authentic self or true worth in this way reflects a distorted and inegalitarian world view where the work ethic has been supplanted by the work aesthetic. He suggests that while work has important meanings for individuals' lives, it can be 'the axis of everything that counts, a source of pride and self-esteem, as well as public acknowledgement of status, but is only available to privileged elites' (p. 34). In a sentiment almost consistent with the perspective of elites in the era of Aristotle and Plato (see Chapter 4), Bauman claims the majority of people are locked into meaningless and degrading work that offers little opportunity for notoriety or fulfilment. He states that while

> . . . a vocation may be many things . . .. but what most emphatically it is not – not in this rendering of it at any rate – is a proposition for a life project or a whole life strategy. (1998, p. 36)

However, such a view reflects a return to a time when leisure or contemplative vocations were the privilege of a few supported by a majority whose own work was denigrated and lacked worth in any form. This position, of course, is not unsympathetic to the view that (Bernstein, 1996) holds about the idea of work being taken over by the capitalist ethos. This kind of perspective re-engages and reinforces a view that elites of different kinds can articulate their conceptions of the worth of other individuals' activities without being empathetic with or understanding of the perspective of those who practise. For instance, presumably Bauman (1998) uses

a metre of his own work and activities to make judgements about that of others (e.g. what constitutes meaningless and degrading work). That is, the kinds of activities that he and other social elites engage in is somehow inherently worthwhile and personally fulfilling, whereas the work of others is not and can never be so worthwhile. Here again, is the echo of the socially privileged voices making judgements about the worth of others' activities from the vantage of own perspectives and as such, demonstrates the enduring qualities of unreflective and non-democratic deliberations. So, such critics raise important concerns about whether individuals' constructions of an engagement in their vocations are ultimately in their long-term interests. Yet, it is important to understand from what perspective they make these judgements and also what kinds of evidence they offer to substantiate that this work they describe is indeed without meaning and degrades those who engage in it.

Quicke (1999), for instance, proposes that the current conception of work ethic (and what that means to the concept of vocation as personal endeavour) is associated with the rise of capitalism, but also has far earlier origins associated with religious beliefs and values. In earlier times, the church decreed the purpose of society and the value of those within it in terms of the moral significance as 'holy business'. Under such a rubric, individuals might consent to engage in holy business and give their life and work to that effort, yet at the same time stand to be personally exploited by it. Later, there was the rise of the Protestant work ethic, which is seen by some as a process of self enslavement premised on the development of a Marxian false consciousness through the machinations of capitalist societies. Yet, Quicke (1999) is silent on the contradiction in his argument insofar as his critique of the work ethic derives from another source: an ideological one. That is, just as with Bauman, and indeed this author, there is the application of a particular view about others. Consequently, such critics would be likely to argue that little has changed across history. Only now we have a more subtle and ubiquitous expression of social suggestion that has led to the development of individualisation that distorts human dignity and, of course, what constitutes individuals' vocations. Hence, these authors would be likely to argue that the aged care, production and bakery workers discussed above are being exploited through their engagement in their work and identifying it as being their vocations. Some would go as far as to say that through these activities they are developing, what Marx refers to as a false consciousness about themselves and their work that distorts their ability to objectively discern among concepts of worthiness. Perhaps now through more subtle means, the suggestion of the powerful social interests is reaching out and capturing individuals' interests, intelligence and agency and making these serve the purposes of those powerful interests.

Nevertheless, such sentiments both rehearse and echo the long-held tradition of those privileged positions of societal elites from Aristotle onwards referring to what constitutes the valuing of activities that they would never or could never do. These critiques, however accepted, emphasise the need for a conception of vocation that is mediated by social forms and imperatives, yet ultimately articulated by and privileging the personal perspective. However, this is not to suggest that there are unattractive and uncongenial forms of work, as well as that which is downright dangerous and which individuals are pressed into for want of preferable

options. However, it is perhaps those who are engaged in work that can make judgements about its worth, rather than those who make judgements from other vantage points.

So, for individuals, vocations are practices with which they need to identify and that identification is often related to their valuing of or engagement with the social world. This distinction is important because although individuals engage in a range of practices, they will not see all of these as being central to their sense of self, and what they wish to call themselves. Consequently, as foreshadowed, not all forms of paid work that individuals undertake can be classified by them as being their vocations: only those components which hold great meaning for them. Crisply, Martin (2001) suggests that vocations are the work we choose to do as distinct from the job we have to do (p. 257). Similarly, Hansen (1994, pp. 263–264) states that

> . . . being a teacher, a minister, a doctor, or a parent would *not* be vocational if the individual kept the practice at arm's length, divorced from his or her sense of identity, treating it in effect as one among many indistinguishable occupations. In such a case, the person would be merely an occupant of a role. This is not to say the person would conceive the activity as meaningless. He or she might regard it as strictly a job, as a necessity one has to accept, perhaps in order to secure the time or resources to do something else. Thus, in addition to being of social value, an activity must yield a sense of personal fulfilment in its own right in order to be a vocation.

This element of personal fulfilment distinguishes between the activities that individuals engage in, but which might mean little or much to their sense of self or personal trajectory and also those they willingly engage in and have meaning for them. It also has implications for how they engage with and what they learn through these activities. For instance, school students' paid part-time work might secure them remuneration to support lifestyle, inform them about the world of work beyond school and sharpen their thinking about post-school pathways for themselves. However, these forms of employment are unlikely to be seen as being vocations by these students because their goals and ambitions are directed to other kinds of activities and forms of paid employment (Billett & Ovens, 2007). The exception may be when that part-time work or voluntary work is associated with their interests. In one study, a university student studying physiotherapy was also working part time in a gymnasium as a receptionist and trainer, to help support her university studies (Billett et al., 2005). This part-time work was well aligned with her intended vocation of becoming a physiotherapist. Later, this young woman shifted her part-time employment to become a receptionist in a physiotherapy centre, for related purposes. This part-time work was aligned with and became part of her vocational trajectory. Yet, in the same study, another young female student was working part time in a restaurant to support her university studies. However, her studies were not in hospitality or management. The owners of the restaurant encouraged her to take on supervisory and training roles with other part-time waitresses in the restaurant. However, she resisted this suggestion, because this was not how she wanted to expend her time and energy. Unlike the owners of the restaurant who were practising their vocation through their work, for this student, her employment was merely a means to an end, not her vocation.

However, vocational trajectories can arise through participation in activities that were initially not enacted or identified by individuals' as being vocational. That is, vocations can be formed through participating in activities that were not initially seen as central to individuals' sense of self. For instance, Somerville (2006) reports that many aged care workers engage in this form of work because it is convenient (i.e. it comprises work which is available locally and fits around other commitments). Yet, over time, she found that many of these workers become engaged with their work and came to identify as aged care workers. So, their initial engagement was based on fulfilling personal imperatives of one kind (e.g. earning money). However, through engagement in this activity and with the aged, their work became important to them in ways that went beyond it being merely paid employment: it became their vocations. Similarly, Chan (2009) reports how the baking apprentices she investigated engaged in baking work because it comprised available work in which they were invited to participate by bakery owners. Yet, over time, these apprentices moved through the process of becoming bakers and came to identify as bakers. What was particularly noteworthy is that these apprentices had not initially set out to become bakers. Instead, they came to work in bakeries because the work was available for them and the bakeries had needed apprentices. So, through their engagement in bakery work and in bakeries they formed a strong association with the particular bakery, and then from there to the occupation being a baker. Hence, their sense of vocation arose from local engagement in a particular baking workplace, rather than a long-standing quest to become a baker.

Analogously, production workers in a food processing plant, who are engaged in work that many people would describe as being semi-skilled and would view as being low status, demonstrated capacities and approaches to their work which in other forms of work would be described as them being professional (Billett, 2000b). These workers were not closely supervised, enacting their work practice relatively autonomously, and in self-directed and monitored ways. How they are engaged and what they did in their work suggests that their conduct emphasised a practice that was central to their sense of personal obligation and to others in the workplace. For instance, it was important for these workers, both as individuals and part of a collective (i.e. a member of a shift), that they met their production quota on each shift, and left the workplace clean and tidy for the next shift, and had resolved any production problems before the next shift took over. These workers demonstrated pride in what they did and despite others perceiving the standing of their work being as lowly, it was important to them to do a good job, to not impinge upon others and to be seen both individually and collectively as competent. Therefore, regardless of the level and societal standing of their work in other people's view, this personal and collective pride in work indicates the degree of worth that guided their efforts and what they gained from the proper exercise of their work activities. Just as ultimately, Dewey (1916) links vocation to the interests of the practitioner claiming that 'self and interest are two words for the same fact' (p. 352). Here we see the rich interdependencies between social and personal goals in the purposes and engagement of the individuals' participation in paid work activities, which they may go on to nominate as vocations.

Certainly, as Rehm (1990) notes, individuals are likely to expect some gain through the pursuit of life's activities. These gains are likely to include the augmentation, consolidation or advancement of their sense of self, as well as their relationships and standing with associates in the practices of the communities (Gherardi, 2009) in which they participate. Hence, conceptions of 'common good and mutuality seem to be very much intact in Dewey's thinking about personal vocations' (Rehm, 1990, p. 117), as is evident in some of these accounts of workers' motivations and engagements described above. Moreover, this emphasis on personal engagement brings a democratic dimension to the concept of vocations. In emphasising the importance and sovereignty of the subject, Rehm reminds us that both Luther and Dewey included within their considerations of vocational:

> . . . the most ordinary person with good motives. The very character of person in the most humble occupation is significant; a common labourer who willingly and creatively adds good touches while carrying out the occupation could possibly have a vocation. (1990, p. 120)

Hence, in these ways, there is a strong emphasis on the personal as an enabler and constructor of vocations, yet regardless, they are still embedded in the social world. However, beyond the social world, the influence of nature also shapes what constitutes vocations.

Imperatives of Brute Facts

Beyond considering the social dimensions of vocations, the case advanced here includes a consideration of brute facts (Searle, 1995): facts of natural world. Whilst much is made of the social influences, less emphasis is given to how the demand of nature, which also cannot be wished away, shapes human and societal purposes and imperatives. There are at least two brute dimensions to what constitutes individual's vocations: (i) there are the activities that arise from the brute world and (ii) there are the brute facts that shape the scope of individuals' vocations (i.e. what they can engage in and aspire to).

Firstly, many of the activities in which humans engage address matters derived in nature. The need to build and maintain, heat and cool accommodation, care for the young and elderly, provide health provisions for those who are unwell and secure supplies of food comprise imperatives found in nature, and manifested in activities that seek to address these brute needs, and how they transform. Certainly, many of the demands of nature are manifested through historically derived and culturally shaped activities, such as the aged care work described above, as well as many other occupations that are associated with addressing human need which are of a brute kind.

Secondly, individuals' activities are also shaped by maturity, which may either promote or limit the activities in which people can engage. For instance, at a certain age, firefighters and military service personnel do not have the physical strength required to engage in some front-line aspects of their work. Hence, their vocational

options are constrained by the brute fact of ageing. Despite earnestly wanting to be firefighters, they may not be able to realise that vocation once they are beyond a certain age. In one study, it was found that 'firefighters' were able to continue in their preferred vocation, but through training, education and supervision roles, not in front-line duties (Billett et al., 2005). In particular, these roles allowed them to continue wearing their uniform with its badge and other artefacts that positioned them as firefighters. Equally, the quality of visual acuity and hearing may well play similar roles in other occupations, such as flying planes or discerning colour differences in fabrics. So, there are implications for individuals as maturity shapes their options and possibilities for what constitutes their vocations and shapes what and how they are directed to engage in and learn about those vocations. These brute facts of nature, like institutional facts (Searle, 1995), cannot be simply wished away, as for instance, in the inevitability of ageing. These natural qualities also shape how we engage with the physical and social worlds with which individuals experience and need to engage.

Yet, although in some ways more difficult to negotiate with or to wish away than institutional facts, brute facts can nevertheless be mediated by individuals and their vocation. Church and Luciano (2005), for instance, refer to workers with disabilities who work around and negotiate such brute facts. Some of these workers deliberately seek to demonstrate their ableness. In this way, they can avoid being labelled as 'disabled' as this brings with it concerns about opportunities to work effectively and how they are positioned by other workers and clients. Moreover, these authors also refer to a colleague who is wheelchair-bound and requires considerable assistance from others to negotiate parts of her life. Nevertheless, she refuses to identify as a worker with a disability. Instead, she claims that because she can use electronic technology to perform her roles as an academic she is an able-bodied worker, and should not be labelled as a disabled worker. In this way, she has been able to negotiate both the physical and identity elements of the brute facts that she confronts.

Therefore, although largely discussed here as a duality (i.e. between the personal and societal or institutional), vocations arise and are transformed through a triality comprising institutional, brute and personal facts. Just as dualities comprise relations between two entities, trialities comprise those among three sets of facts: in this case, the contributions of the brute, social and personal worlds. Together, they provide bases for elaborating a view about vocations, how they are generated, enacted and transformed through negotiations comprising those amongst social, brute and personal factors. Yet, beyond vocations as practices shaped historically by cultural facts and the imperatives of the brute and social worlds, vocations ultimately stand as personal practices. This personal dimension is perhaps best championed by Dewey's (1916) characterising vocations as being individuals' life courses and their having more than one vocation (e.g. as a parent, worker and community participant). Thus, vocations are person dependent, not the least because the individual will also need to negotiate among their different vocations and prioritise them. Importantly, it emphasises that, ultimately, because vocations are generated by, and require the assent of the individual, they are shaped by their person-particular set of interests and imperatives, experiences and capacities

and are multiple not singular. In this way, they strongly privilege the individual in their creation, continuity and demise. However, personal facts have their own characteristics, including limitations, and given the importance of vocations and occupations as having socially derived purposes, these limitations need to be accounted for, particularly in relation to social activities and purposes.

Limits of the Personal as Vocation

Having elaborated the personal premises for vocations, some caution needs to be exercised when advancing vocations as a wholly personal practice. This caution extends to the degree by which individuals are actually able to exercise their choice in the selection of vocations, and also the limits to the exercise of that vocation.

Firstly, there are often necessary and reasonable limits to the free exercise of individuals' vocations. An early conception of vocations is as a 'calling'. This conception exemplifies the negotiation between social and personal worlds. That is, there had to be an activity to which individuals were called, and it is likely that something or somebody is doing a calling. Yet here, is the need to consider the implications for individuals being assigned by birthright (i.e. what one was called to do) to those from which they could elect and seek to secure (i.e. their ability to pursue their calling). For instance, it was not that long ago that the range of possible occupational choices in most countries was highly constrained on the basis of gender, as it still is today in some countries. That is, there were many occupations that women simply did not participate in, nor were they encouraged to do so; this still persists today in some circumstances. Put simply, these occupations may not have been a reasonable option for them to even consider, let alone pursue. Hence, it is important to be reminded that there are constraints upon the kinds of activities that individuals can engage with and ultimately become their vocation.

Therefore, the social world also provides boundaries for what can become individuals' vocations. Being called by birth to a particular class or occupation (e.g. what is undertaken in the family, community or class, or gender) is a boundary for some individuals. For other people, being called to some vocations established and valued by others (e.g. the press upon high-performing high school students to engage in preparation for professions preferred by their parents or teachers) is a boundary. Yet again, through the valuing of individuals by their own efforts and talents, not just their birthright (e.g. opportunities that accentuate or overcome circumstances of birth), and the options and consideration available to individuals when selecting and pursing their own vocational interests may also be seen as boundaries. The point here is that the options available to access activities and for them to become individuals' vocations are bounded by societal norms and practices, in different ways and for different kinds of purposes. So, it would be quite inaccurate to propose that individuals' choice of vocations is purely premised on their own efforts, capacities and agency. There are boundaries that shape the potential choice and these are established and exercised by others in different ways and for different

purposes, across different communities and times. These choices are both practical and restrictive, but they are often beyond an individual's control.

Secondly, it is important to acknowledge that the occupational actions of individuals are not always in either their or others' interests. Indeed, individuals' energy and interest (i.e. enthusiasm) is all very well and commendable for individuals achieving their goals, and are essential for effective learning. However, it may be inconsistent with what is required for a socially mandated practice that requires particular qualities (e.g. a doctors' discretion, a teachers' evenness or an airline pilots' caution). For instance, individuals who bring a sense of agency and commitment to their work embody the belief, whether consciously or not, that they have something to contribute to it (Hansen, 1994). Indeed, sometimes this is expressed in a set of ethics or values associated with particular forms of work. For instance, Dror (1993) states that engaging in activities with enterprises that have profit-making purposes is morally inferior to serving public interest through government or public interest organisations. But the notion of being 'called', of having something distinctive to offer, should not imply a kind of blind faith in one's capabilities or desires. This caution suggests that personal interests and motivations cannot be unbridled in the conduct of purposes which have societal or even personal implications. Instead, they may need to be mediated by sets of interests that are central to the activity which has become the vocational focus. For instance, some occupations have mechanisms for guarding against enthusiastic, but incompetent practitioners. This is often realised through processes requiring occupational registration, or pathways of activities in which competent workers need to demonstrate capacity (e.g. levels of educational attainment) and where monitoring occurs and through arrangements in which novices engage in tasks that carry relatively low risks before moving to activities that have greater risk and consequences of failure. So, what is afforded by the social world comprises both opportunities and constraints, with boundaries that limit individuals' agency being exercised in ways that address existing societal norms and values.

Hence, as defined earlier, a vocation comprises a personally subjective practice, albeit socially shaped, through which individuals form associations and identities, and come to see their worth as been judged in some ways, including by their social partners. This engagement across the social world, social institutions and powerful interests means that while a practice may be personal, or even uniquely social, it is unlikely to be wholly separate or independent from the social world, and all that it implies.

Constituting Vocations

The characterisation of vocations advanced above suggests that they reside in the relations between the societal and the personal, and are also shaped by brute facts that influence how individuals construe those relationships. Indeed, this negotiation most likely occurs in circumstances of practice where activities and interactions are

enacted and directed towards particular purposes, yet, ultimately shaped by individuals' interests and sense of self. Dewey (1916) concluded that we learn through vocations, rather than for them. This seems an important point. It makes a clear distinction between something which is merely personally constructed and that which is largely a product of social practice and esteem (e.g. a high-status occupation). It also emphasises the relations amongst the personal and the brute and social worlds beyond them. In this way, vocations are essentially developed in the negotiations that are mediated by both societal and brute imperatives and contributions that cannot be wished away or avoided. On the one hand, a vocation is dependent upon there being a historically and culturally derived practice that has presence of some kind in the community in which it is practised, yet which, on the other hand, requires individuals to engage with that practice in enduring ways, which they find personally meaningful and worthwhile. It also carries with it sets of societal norms and values that are important reference points for how others and those engaged in such activities come to view what individuals do and its worth for both them and their associates. As Dewey (1916) proposed, beyond vocations having a meaning that is congenial for the individual, that congeniality needs to extend to the individual's associates and their community. This proposal emphasises the worth of vocations as being institutionally as well as personally beneficial. Of course, the scope of societal assent is relational. A lower level of such assent may well be required for vocations such as stamp collecting or bird watching than it is for interventions in other people's health, financial or psychological well-being, or the reverse might be true. Bird watching will probably be less bounded than being paid for financial advice. So again, these societal facts are likely to be relational in that they are premised upon those individuals select for themselves.

However, the personal assent, imperatives and contributions are also central to what individuals select as their vocations and their subsequent remaking and transformations. Despite their having historical or brute origins and particular cultural imperatives for their conduct, their enactment is ultimately a product of individuals' personal conceptions and engagement at a particular point in time and in specific circumstances. This engagement comprises a negotiation amongst history, culture and situational factors that constitute the situational requirement for the practice where they are societal, on the one hand, and individuals' enactment based upon on these construals, capacities, interest and possibilities, on the other. Importantly, however, this very engagement is also important for the continuity and development of activities such as occupations. As they comprise historically, culturally derived and situationally manifested sets of practices, they would be inert and moribund if individuals did not actively enact, remake and transform them (Giddens, 1984). Not only do individuals engage in the enactment of and remaking occupational practice, they are also the agents that remake and transform these practices, albeit mediated by cultural and situational factors that also shape the occupation. Such remaking and transformation is directed by individuals' capacities, efforts and interest. Hence, while vocations can be seen as being derived and transformed through the imperatives of social practice, this cannot occur without individuals engaging with, learning about and enacting those practices (Billett et al., 2005). This is most

likely to occur when individuals also have these practices as their vocations, thereby exercising the interest, intentionalities and the engagement that is required to both remake and transform those practices.

Therefore, as discussed above, the concept of vocation as personal mission alone is insufficient, because vocations are also socially shaped. Interest in and 'calling for' or 'being called' by a particular activity is not possible without the historically and culturally derived capacities and their manifestation in the form of situational requirements. In all, it is the personal performance with situational requirements that will be judged so that the conduct of that practice satisfactorily meets those requirements. This is not a negotiation between the asocial individual and the social and brute worlds. Instead, it is a negotiation between the socially shaped personal (i.e. individual) bases of construal and construction and how and what individuals experience in the immediate social world in which they engage in and enact their occupational practice. Just as there are institutional facts that shape the norms and practices that individuals encounter and engage with, these have been described by Valsiner (2000) as social experience (i.e. what individuals encounter when engaging with the social world) and individuals' cognitive experience (i.e. the bases of how they construe and construct what they experienced). These facts and experiencing are enacted in ways that emphasise the relationship between the personal and societal, and also, potentially, the brute.

It is the relationship between the appearance of activities on the social plane and the individual plane where the process of becoming a vocational practitioner emerges, and where boundaries are likely to be experienced, and have to be negotiated. Importantly, and finally, Hansen (1994) proposes that the sense of vocation can only emerge within a social practice, that these practices may be quite distinct in particular ways and that negotiating across different kinds of practices may well be part of an individual's vocation. In making this point, Hansen (1994) refers to the writing of the anthropologist Dorothy Lee. Lee (1953) cited in Hansen (2004) reflects upon her own negotiations amongst the personal, societal and the brute in reflecting on vocation.

> ... she found herself continually justifying her motherly duties in the face of her desire to serve her profession. She had developed the habit of rationalizing her familial actions. Thus, she found herself that Christmas Eve mentally defending her conduct, anticipating that her gift would make her three-year-old daughter happy, and regretting that in any case she could not afford during those lean times to buy the gift instead. But then an unexpected thing happened. She looked down at her work and discovered with surprise that, unawares, she had begun to add an edging of embroidery that was both "unpremeditated and unnecessary." That discovery triggered an equally sudden feeling of joy. She explains that this sentiment had nothing to do with the pleasure the work would give to my daughter on the morrow; it had nothing to do with a sense of achievement, or of virtue in duty accomplished. And I knew that I had never liked to embroider. There was no justification for my work; yet it was the source of such a deep satisfaction, that the late hour and my fatigue had ceased to exist for me. (Lee, 1953, p. 28)

Lee continues (1953, p. 28):

> I knew that I had truly become a mother, a wife, a neighbor, a teacher. I realized that some boundary had disappeared, so that I was working in a social medium.

At that same moment, Hansen (1994) suggests, Lee's need for justification melted away. Lee understood that she was not doing familial things for instrumental purposes; there was no 'reason' for adding that embroidery. Rather, if it makes sense to speak of a reason, it lay in the practice itself of family life.

> What gave meaning to my work [that evening] was the medium in which I was working – the medium of love, in a broad sense. So far, my rationalization and justification of my work had obscured this meaning, had cut me off from my own social context. It suddenly became clear to me that it did not matter whether I was scrubbing the kitchen floor or darning stockings or zipping up snowsuits; these all had meaning, not in themselves, but in terms of the situation of which they were a part. They contained social value because they implemented the value of the social situation. (1953, p. 28)

Noteworthy here is the embedded and relational character of this negotiation between personal and societal factors that were also shaped and constrained by brute factors that arose in these reflections. Continuing, Hansen (1994) proposes that that Lee's testimony suggests that practices like parenting, marriage and teaching embody their own justification and reasons, which often seem to 'invite' or call one to commit oneself to them. They constitute social media which provide meaning to the doings they prescribe. That meaning is derived from within the work itself, not merely from external reward or approval. Hansen (1994) suggests that in the privacy of her home, Lee was not seeking that late evening to 'demonstrate' that she cared for her daughter or that she was a dedicated spouse or homemaker. It seems that conceptualising what constitutes a vocation resides in understanding the relationships and negotiations. Vocations then need to be seen as occurring not on two planes: the social and personal, but through an engagement and embedding of both of them which have particular consequences for the personal. This embedding is partly because it is the negotiation between the circumstances in which the vocation is to be enacted and individuals' sense and construction of the vocational practice that is central to what is being practised, remade and transformed by individuals.

Therefore, at this point, it seems appropriate to return to the definition of a vocation advanced at the beginning of this chapter as being:

> personally directed and assented but often socially derived practices, that reflect an individual's enduring aspirations and interests, and are usually manifested in culturally and historically derived activities that may carry worth for both the individual and their community.

Consequently, an account of what constitutes vocations needs to have as a central concern accommodations between the contributions and agency of the social world (i.e. history, cultural and situational norms and practices) and the assent, contributions and agency of the personal (i.e. conception, capacity and energy). While institutional facts continue to shape the requirements for occupations and their standing, the space for individuals within these conceptions is growing incrementally. So although the distribution of opportunities is shaped by factors such as age, race, gender and wealth, there is incrementally a growing space for individuals to negotiate their occupational trajectory, rather than it being culturally determined or on the basis of circumstances of birth, class, gender and wealth. Of course, the

struggle needs to continue for greater emancipation and fairness and to retain what has been achieved, but the legitimacy and need for more individuals to negotiate their positions have evolved over time. More than identifying and elaborating an occupation, there is a need to account for how these requirements for practice differ, and also from what perspectives these practices are to be practised and are likely to change over time.

In all, vocations stand as being:

- personally premised in terms of assent,
- societally sanctioned,
- personally engaged, and as
- practices to be exercised, remade and transformed.

Vocations

It has been advanced across this chapter that vocations have personal resonance and importance to the individuals who assent to, construct and enact them. In this way, forming, developing and sustaining a vocation is a personal endeavour, especially in its search for negotiation of meaning with the social and brute worlds with which individuals negotiate as they live and work. Clearly, such a sentiment is markedly distinct from a concept of vocations wholly shaped and determined by others, particularly powerful social institutions and practices. As discussed in the next chapter on occupations, in contrast to the conceptions of vocations discussed above, this sentiment is captured in the German concept of occupation or *beruf* which comprises a body of systematically related theoretical knowledge (*wissen*) and set of practical skills (*können*), as well as the social identity of the person who has acquired these (Winch, 2004b).

Therefore, notwithstanding the protestations here against the domination of the perspectives from social elites, it is important to acknowledge that this personal construct is not one that is asocial. Instead, it is a uniquely personally social entity that is developed as a result of individuals' experiences. That is, vocations arise in particular ways through individuals' life histories or ontogenies. Yet, at the same time, the agency of the personal needs to be mediated by concerns that seek to legitimately constrain unhelpful and unwise agency through the kinds of social imperatives and requirements associated with many occupations.

This then leads to a consideration of occupations as being a product of institutional facts of culture, society and history, and that which serve human needs and also provide bases for individuals to engage with and develop their vocations through.

Chapter 4
Occupations

The German concept of occupation or Beruf *signifies a body of systematically related theoretical knowledge* [Wissen] *and set of practical skills [Können], as well as the social identity of the person who has acquired these.*
(Winch, 2004a, p. 182)

The duty of choosing a profession [is] the most important of all duties . . .
Rashdall (1924, p. 109), cited in Frankena (1976, p. 393)

This chapter conceptualises and elaborates what constitutes occupations, as these, in practical terms, stand as the key object of vocational education. The identification of, preparation for and ongoing development of individuals' participation in paid employment (i.e. occupations) stand as the most common, although not exclusive object of vocational education. To understand how we should consider and conceptualise occupations in the present day, it is necessary to account for how they have been thought about in the past because these concepts shape educational provisions in the present. This elaboration of occupations can then inform what is intended for and enacted in schools, vocational colleges and universities, and across workplaces that comprise the field of vocational education. It can advise how individuals should be engaged with, and inform how they, in practice, engage with vocational education, to secure such purposes. It is likely that the occupations and the provisions of education that support them will be different across nations and cultures. This is because, directly or indirectly, specific focuses for different occupations and diverse kinds of institutional arrangements shape and mediate the approach and forms that vocational education takes.

The chapter commences by discussing what constitutes occupations and how they can be understood as being a societal artefact. As such, this conception necessitates an elaboration of how societal factors shape the standing, worth and even legitimacy of particular forms of occupations and the educational provisions that support them. These considerations are elaborated through accounts of occupations across some instances of human history. The relationships between individuals and occupations are discussed next in terms of the latter being callings to which individuals are called to or whether they comprise their callings and how these relations

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have changed over time. Then, the case is made that although professional work shares many commonalities with the educational goals for and learning processes required within other occupations, its standing and preparation is seen as being wholly distinct from those catered to by the vocational education sector. Hence, the distinctiveness between occupations classified as professions and those which are not are indeed more quantitative than qualitative and that similar education provisions are required for all occupations. That is, the professions do not necessarily represent a particular exception to the goals, form of provisions or required outcomes within the broad field of vocational education. In the discussion that follows, occupations are held to be largely a fact of the social world, arising from cultural needs and transformed throughout history. In all, this conceptualisation of occupations highlights differences with the concept of vocations elaborated in the previous chapter as being ultimately a personal fact. Yet, as has been foreshadowed in that chapter, it is also important to recognise that occupations can be thought of as being the second of the two conceptualisations of vocations: particular forms of paid work.

Occupations

The case developed within this chapter is that occupations essentially arise from societal imperatives and cultural needs and evolve over time accordingly. Thus, particular occupations may become more or less relevant, prevalent or important over time. Consistent with this view, cultural needs and societal imperatives have dominated discourses about occupations and the educational provisions supporting them (i.e. vocational education). As a result, some occupations and their preparation have been privileged over others. For instance, preparation for high-status occupations such as the professions of medicine, law or finance has occurred in universities in ways that are exemplars of vocational education, yet are rarely referred to as such. Indeed, the preparation for such occupations is seen as distinct from and almost the opposite to the purposes and practices of the vocational education sector. This privileging has often occurred in ways that have been detrimental to less socially esteemed occupations. Indeed, most occupations classified as being below the status of professions are effectively those that are the focus of the vocational education sector. This is the case in the different provisions of vocational education in countries across the world, either in terms of occupationally specific programmes, or ones such as pre-vocational programmes in schools and colleges that prepare students for these kinds of occupations. A key claim here is that, across time and place, discourses about occupations and their preparations advanced by socially privileged voices have served to both shape and often ultimately position the vocational educational sector narrowly and weakly. Being prompted and controlled by such interests, these discourses have also largely excluded and denied the voices of the occupational practitioners who understand intimately their occupation's worth and complexity. Instead, the character, worth and societal views of both occupations and vocational education have been advanced by powerful and privileged voices, such as aristocrats, theocrats, bureaucrats and professionals. However,

often the judgements of the worth of occupations are premised more upon societal biases than upon objective assessments of the complexity and extent of knowledge required to practise them, and how this knowledge should be best developed. This legacy needs to be questioned and overturned.

Further, as proposed in the previous chapter on vocations, it is individuals' enactment of their work activities (i.e. occupations) that is central to how they are practised, remade and transformed. This is because these processes are as much dependent upon those who enact them as upon demands from society for continuity and change of different kinds. Yet, there is also something insidious in the influence of the voices of these powerful others: views about the particular characteristics of people engaged in particular kinds of occupations. For instance, the idea that those engaged in trade occupations, as well as those often referred to as semi- or unskilled workers, have inherently quite limited capacities to make decisions and learn. Such sentiments shape views about the worth of these people engaging in education, and the purposes and kinds of educational experiences suited for them. Moreover, their presumed limitations also appear to be used to restrict their engagement in discussions about how the educational provisions for their occupation should best proceed. Instead, often (non-practising) spokespersons, for those who practise, are used to advance the interests of these occupations. Clearly, these matters of societal bias and their enactment go to the heart of the organisation of education and educational provisions to this day. However, many of these premises appear to be erroneous as those engaged in all occupations need to be able to exercise higher forms of thinking and acting to manage their work and secure the kinds of goals that are required of them (Billett, 1994; Darrah, 1996).

The primary purpose of this chapter is, therefore, to elaborate a conception of occupations as having personal as well as social dimensions. Whilst primarily being an institutional or social artefact, neither the social nor the personal considerations are alone sufficient to represent what ultimately constitutes occupations as the key object of vocational education. Alone, nor does each advise how this form of education should best proceed. Therefore, only through accounts capturing the social and the personal dimensions of occupations can they be fully understood. Only then can the educational purposes and provisions supporting their continuity and further development be properly advanced. Occupations necessarily comprise socially and historically constituted practices that have particular norms and practices, as well as standing in the community. Yet, it is individuals who engage with occupations and learn to practise them. In this way, individuals find particular meaning in, come to identify with, and, in doing so, remake and transform those practices associated with their occupation. Put plainly, the social world provides the needs for, concepts about, procedures for and sources of occupations as cultural practices. As well, it generates the knowledge to participate in those practices and is generative of the situational factors that shape how occupations are conducted in particular situations (Billett, 2001a). Moreover, much of an individual's sense of well-being and worth, as well as personal identity, is often associated with these socially derived practices. Consequently, there is a need to consider both social and personal dimensions in understanding what constitutes paid occupations, preparation for them and

their continuity across individuals' working lives. Developing an account of occupations accommodating both these dimensions provides bases to understand and appraise distinct focuses for and purposes and processes of vocational education, albeit undertaken in a range of institutions across national and cultural contexts where they are enacted and at particular points in nations' progress, as well as in individuals' developmental trajectories.

In making this case, the remainder of the chapter is structured as follows. Conceptions of occupations, seen as comprising both social and personal dimensions, are discussed first. These premises are then elaborated through a discussion of the evolving historical development or the concept of occupation as societal facts. To make this point, occupations as they have been described and valued across time through societally privileged voices are discussed as are the specific implications of these for vocational education. Hence, the standing of occupations, and the forms of education that supports them have been proposed by those who speak 'about' rather than 'for' the particular occupational practice. Typically, this comes at a cost to occupations and their standing (Kincheloe, 1995). Ultimately, it is proposed that privileged social views have constituted a disservice to those occupations and the form of education that has sought to generate and sustain them. Finally, through a consideration of these historical and more recent accounts, the positioning of the individual becomes more central and essential, particularly when it features strongly as an enduring and personally committed practice.

Occupations as Paid Work

As occupations in the form of paid work are the key focus of vocational education, a necessary starting point is to discuss and define this concept. Without such a discussion, it is likely that this project will remain an uncertain and perilous task. Consideration of these premises provides a broader set of bases for elaborating the concept of occupations and their meaning and worth to individuals and their communities. Also, of particular salience to adults' initial learning and ongoing vocational development is whether they identify and engage with their paid work as a vocation or just paid employment. As discussed in the previous chapter, this distinction between occupations as paid employment and occupations as individuals' vocations which are personally significant suggests quite distinct forms of engagement with occupational activities, and their development and remaking.

Certainly, a comprehensive account of occupations also seems warranted because of their importance to the servicing and support of society, both to the individuals who practise them and the communities that rely upon them. For many, if not most people, engaging in working life comprises more than just securing remuneration (Noon and Blyton, 1997). It also includes issues of individual identity, well-being and subjectivity, and the attainment of personal goals, albeit set within a particular cultural and societal context. Indeed, and moreover, an individual's goals for working life often exist in complex relations with lives beyond paid work (Noon

and Blyton, 1997; Billett and Somerville, 2004), such as the status of the occupation within the community, its engagement and entitlements and what it provides the individual in terms of material and social rewards. Yet, all of these factors also emphasise that occupations are profoundly social concepts. Societal views determine the status of occupations, the arrangements for their rewards and entitlements, and also the kind and duration of their preparation, and requirements for their ongoing development and transformation. In this way, although engagement in paid work activities is more than the enactment of historically and culturally derived practices, techniques, roles and specific skills that arise from and are enacted in the social world, these are profoundly influential. All these factors are important because occupations arise from and are sustained and transformed because of cultural needs, and those needs change over time. Yet, in addition, and, importantly, through their enactment, individuals engage in finding meaning in these activities in ways that often have personal significance for them (Rehm, 1990) and can position them within their community. In engaging in and remaking an occupational practice, individuals are addressing these cultural needs and responding to emerging cultural imperatives. Of course, not all occupational practices are seen as having equal social worth. Rather, these are the bases upon which an occupation's worth is generated and exercised.

A premise to commence with is that occupations are primarily a social artefact, albeit enacted by individuals, some of whom will assent to their occupations becoming their vocations. Whereas, vocations arise from within individuals' personal histories or ontogenies, the geneses of occupations are within culture and history. This distinction differentiates between paid work per se (i.e. occupations) and individuals' vocations. Occupations have arisen because of human need for particular sets of skills and capacities. This need does not arise from within individuals, but from within collective need. It is likely that this need arose in quite different ways in particular national (i.e. societal) contexts. One of the earliest significant accounts of occupations is evident within ancient China. Almost two millennia before mass production was 'invented' by Henry Ford in America, the needs of large populations, sophisticated communities and advanced lifestyles demanded that workers in China develop the capacity to generate products in very large quantities (Ebrey, 1996). Moreover, they were highly regulated (Barbieri-Low, 2007). The particular kind and formation of occupations that were generative of highly skilled artefacts were divided into quite specific and segmented tasks, as were enacted by individuals working as part of a larger team of similarly skilled workers engaged in generating these artefacts. This conception of occupation is quite distinct from the European tradition of the skilled artisans who had a far broader scope of skills, yet were required to make complete artefacts themselves, and in relatively small numbers. Consequently, the conception of occupations and what would be taken as a skilled worker is quite distinct across these two cultural contexts, and likely to be so across others. Yet, significantly, a commonality to both cultures was that lower-status workers were dealt with in ways that left them subject to the control of powerful elites. For example, artisans were often treated as a commodity and were organised to meet the needs of individual rulers or ruling elites.

Nevertheless, the sense of vocation and personal worth manifesting itself as a collective concept arising from associations with a particular occupation existed within occupations, which was often manifested in the establishment of associations, guilds and trade unions. So, whilst such groups were seen to be subordinate to the ruling elites, they possessed an identity associated with their work. The German concept of occupation or *Beruf,* referring to 'a body of systematically related theoretical knowledge [Wissen] and set of practical skills [Können], as well as the social identity of the person who has acquired these' (Winch, 2004a), captures well this amalgam of capacity and identity. This definition emphasises the social origins of occupational practices, knowledge, how it is and even the societally derived quality of identity. Although offering a largely socially derived concept of occupations, Winch (2004a) also acknowledges a need for a personally directed negotiation between work, leisure and family life (i.e. a vocation), which are likely to be important for the individuals who practise the particular occupation. Yet, despite its personal salience, the basis upon which occupations carry societal status and worth is quite distinct: they each have particular origins, forms and purposes firmly within cultural and historical premises. These social facts shape the kinds of institutional arrangements such as educational provisions that are provided, the qualities of the educational goals to be realised, the duration of experiences that are provided to develop these forms of knowledge and the kinds and levels of certification that are advanced for them. Given all this, it is important to understand how different concepts of occupations have arisen over time and the factors that shape different societal sentiments about them.

The Worth of Occupations

The origins and manifestation of how forms of work are constituted and valued are rendered distinct across countries because of their cultural and historical legacies. Indeed, whilst there may well be views about approaches to work and what constitutes skilled workers are often taken-for-granted assumptions, we need to be critical and reflexive of these approaches. Whalley and Barley (1997, p. 24) remind us that the view from the Western world is but one view:

> As in all societies, Western notions of work rest on long standing cultural distinctions, legacies of meaning which bind us to our past. Though we may not be aware of them, distinctions between management and labor, profession and craft, blue and white collar, employee and self-employed, permeate the way we talk, write, and think about work. They have utility precisely because we take them for granted.

The point here is that the taken-for-grantedness can limit how we view and value skilled work and the associated assumptions about how vocational education should be configured for communities and individuals in globalised times. This is important because, as in the past it is often elites, who have little conception of actual practice, who continue to make decisions about both skilled work and the kinds of education system that should support it. For instance, when considering what constitutes

worthwhile skilled work, often European trade workers are proposed as the ideal, and the European model of apprenticeship system is proposed as the optimum to prepare such workers. Indeed, many vocational education systems in places such as Australia and Europe are built around this concept. Yet, what constitutes skilled work and the provision of education that develops occupational competence is far from uniform. For instance, the epitome of ancient Chinese craft workers appears quite distinct from craft workers in European traditions. Ancient Chinese craft workers were less the independent artisans and more the artisans having specific skills and capacities and working as part of a team of similar workers. They had to produce huge volumes of artefacts for populations that are many fold greater than those in European countries. One risk here is that, based on Western conceptions, these workers might be mis-classified as 'merely' process and production workers. Yet, such a description would not be applied to those who currently manufacture aeroplanes in Europe and North America, though their work seems analogous to the processes of skilled work and attributes of skilled workers in ancient China.

Differences in the valuing of craft within dominant cultural interests are also evident in comparisons between ancient civilisations, for example, China and Greece. Confucius was from a humble origin, yet became a scholar and also an archer who valued this kind of skill. So, he valued manual capacities. Indeed, skilful performance in crafts, such as calligraphy, was valued as a competency required by senior administrators and required for the public examination used for access to and promotion in the meritocracy-based Chinese public service (Ebrey, 1996). However, this is not to suggest that these workers were treated respectfully. There is evidence that Chinese emperors used forced labour and conscripted artisans, not just in constructing roads and canals, but also extending it to artisans making fine porcelain and pottery (Kerr, 2004).

Indeed, the valuing of work in both China and the Western world was and is currently formed and ordered by powerful 'others' (i.e. aristocrats, theocrats, bureaucrats and managers) within the dominant culture. This ordering has caused skilled workers to find means to secure their occupational identity outside dominant cultural institutions and they have done this through family (names and business), crafts, guilds and trade union affiliations. This was exercised in medieval cities with skilled workers coming to gather in particular streets or parts of cities and to form powerful guilds and trade unions that aimed to serve the interests of those occupations. Moreover, powerful elites' sentiments and values do much to shape not only the standing of work but also considerations of provisions of education for that work. It is this sentiment that has long privileged more general kinds of education over more applied forms (Oakeshott, 1962; Bantock, 1980). This situation has been the case even in the Germanic countries where craft is valued (Hillmert & Jacob, 2002).

As Whalley and Barely (1997) suggest there are long and quite deeply held historical and cultural premises that shape the standing and nature of work and its preparation. The earliest accounts of learning through and for work are from Mesopotamia (Finch & Crunkilton, 1992). Yet, early and impressive account of skilled work and its development can be found in ancient China (Barbieri-Low,

2007). Here, the early need of mass-produced items required high levels of skill and work organisation to be developed far earlier than in Europe. From very early in its history, across a succession of imperial dynasties a key imperative in China was to sustain a massive population through well-organised and ordered state-ordained schemes. These included meeting the range of personal, economic and community needs of many large cities with amenities such as running water and sewerage disposal, long before these were available in Europe. All these needs required large numbers of highly skilled practitioners whose work could realise both high-quality and high-volume artefacts and services. To illustrate this point, it is noteworthy that in 1086 the Doomsday Book estimated the British population to be between 1.75 million and 2 million people. However, at this time, there were 100 million people living within the then Chinese Empire. Moreover, in 1085, the annual production of the Song government's mint is claimed to have been over 6 billion coins (Ebrey, 1996). The mint's production process included stone moulds to form the coins from molten metal – a process which had been long practised in China. Yet, the scope and scale of this production alone demanded high levels of skill and work organisation which extended from securing metal ore and fuel to smelt the metal to distributing the coins securely across the empire. There were also quality control and associated mechanisms to protect the currency of the coins. However, far earlier than this, there is evidence of the development of significant skilfulness and mass production of artefacts in China, all of which required great skill and the organisation of different kinds of skills (Ebrey, 1996). In the Shang dynasty (1600 BC), large intricately decorated copper vats were manufactured through processes that required bringing together different sets of skills. In the Zhou dynasty (1050–250 BC), stone moulds were used to mass-produce knives. Intricate bronze trigger mechanisms that required high levels of precision were mass-manufactured for crossbows in the Quin dynasty (221–206 BC). Moreover, at this time coins, drainage pipes, arrowheads and tiles were all produced in numbers required to meet the needs of a vast population. The Tang dynasty (618–906 AD) became renowned for its production of porcelain items, many of which featured complex shapes and many layers of glazes and, which like those processes referred to above, all required high levels of skills and work organisation to manufacture.

All these examples indicate that aligned to the societal requirement for mass-produced high-quality artefacts was the need for a particular model of highly skilled workers. Further, the ways they were required to work led to particular conceptions of the skilled workers and work processes that are distinct to traditions developed elsewhere. Yet, the standing, scope and practices of skilled workers seem analogous to those currently working to manufacture complex artefacts such as railway locomotives and aeroplanes. For instance, accounts of the production of the Terra Cotta Warriors in the Quin dynasty (221–206 BC) indicate that each of these warriors was manufactured to be unique in some way, and there are great differences in appearance and form across the entire cohort of these warriors. Yet, it is likely that only eight different moulds were used to make them, obviously with great skill and adaptability (Portal, 2007). Apparently, these warriors were constructed by a team of artisans working together in a workshop to mould and form each

warrior in a production line-like process, albeit supervised by foremen who were responsible for the quality of individual figures. These traditions of the enactment of skilled work were long standing as noted above, and continued long afterwards. For instance, much later during the Ming dynasty (1368–1644 AD), the Jingdezhen kilns produced large amounts of high-quality porcelain for the imperial palace. This output indicates not only very high-quality artefacts, because the imperial palace only accepted goods of the highest quality and absolute uniformity, but also the ongoing capacity for mass production. Indeed, it was these porcelain products that became one of the first global exports to countries across Asia and to Europe and Central Asia (Ebrey, 1996). The point here is that the European view of the skilful artisan is not the only model. The concept of a skilled worker in ancient China was premised upon meeting a particular set of societal needs and within a particular set of institutional structures. Moreover, that conception of a worker and work organisation is analogous to requirements in contemporary times that are distinct from the trade workers who learn through apprenticeship. While undoubtedly hierarchically organised and specialised, the nature of skilled work was deemed to be important and worthwhile and recorded in paintings and philosophic commentaries, and some forms were seen as worthy pursuits for societal elites.

As can be seen, the concept of, distinctions amongst and worth of occupations have evolved over time, and through eras that privileged occupations in distinct and particular ways. This evolution generated legacies that influence how occupations are valued to this day (Elias, 1995). The kinds of discourses that have been used over time to characterise occupations and to differentiate amongst them as worthy vocations are overviewed in the sections that follow. Throughout, it is proposed that it has been the voices of privileged elites and powerful others that have shaped the social discourse about occupations, their worth and ultimately the kind of preparation and ongoing development that they warrant. That is, the voices of powerful others, rather than those who practise an occupation, have consistently been permitted to shape the perception of, discourse for and make decisions about these occupations and the educational provisions that support them. One of the earliest and perhaps most enduring legacies concerns who has been able to access different occupations.

From 'Called to' to 'Calling for'

As noted, an early conception of occupations is as a 'calling'. However, this calling can be divided into those which individuals were 'called to' and those which are a 'calling for'. Both of these kinds of callings are shaped by social forms and practices and each implies very different bases for engagement. Being called to something is that which is sanctioned by another. Calling 'for' implies that the individual has choice in terms of the occupations in which to engage. Yet, for many, the basis of that calling was constrained by there being few options into which they were being called. Indeed, the scope of these callings and by whom they could be accessed is

central to the privileging of occupations. That is, across human history, for many and probably most people, their 'calling' was constrained to a particular occupation that was accessible by birthright and largely through family. Across human history, the kind of work being done within the family to which individuals are born or being conducted nearby in the community constituted the range of callings with which they could engage (Bennett, 1938; Butterfield, 1982; Greinhart, 2005). For most individuals, it is only in relatively recent times, and still only in some national contexts, that there has been an array of choice about the kind of occupations that they could be called to. Even then, the available choice of occupations is likely to be constrained by social norms, forms and structures (e.g. gender, age, qualifications and social fit). For instance, opportunities to participate in prestigious occupations such as medicine and architecture in Hellenic Greece were premised upon being a male from a freeborn family (i.e. citizen), having a sound general education, being able to either learn these occupations from your father or having funds to pay to learn these occupations and, sometimes, having the capacity to take many years to learn the occupation (Clarke, 1971). This is not to propose that only those able to consciously select their preferred occupation can ever have a worthwhile vocation, but to draw attention to the constraints that shape the ability to be 'called to' occupations. That is, such is their social shaping that for the majority of people most occupations were beyond their societal reach.

Indeed, enduring debates about the worth of particular occupations and vocational education are still shaped by views from Hellenic Greece that distinguished between learning for physical work and learning for leisurely or cultural pursuits (i.e. physical and mental labour), with the latter enjoying privileged cultural status (Elias, 1995). In particular, freeborn Greek male citizens would deem it beneath their dignity to engage in anything that was predominantly manual, apart from military endeavours. Such occupations were seen to be without virtue:

> The citizens must not lead the life of mechanics or tradesmen, which is ignoble and far from conducive to virtue. Nor . . . must they be drawn from among the farming class, because leisure is necessary for the growth of virtue and for the fulfilment of political duties. . . . No one can rule satisfactorily without leisure derived from easy circumstance. (Aristotle, 1964, p. 60, cited in Elias, 1995)

These views propose a hierarchy of occupations in which leisure, characterised by the capacity to engage in enriching mental activities alone, was held to be inherently superior to the occupations comprising paid work. Although the latter was generative of important goods and services, such activities required manual effort, which ruled out its engagement by societal elites. Perhaps all this is quite unsurprising given that this was a society in which slaves were expected to perform manual tasks. Yet, right from this time, and probably before, there emerged an ordering of work activity with artisans, artists and the professions constituting a hierarchy that were to be engaged with by those who had to work (Lodge, 1947). At that time, from the societal elites' perspectives, the worth of occupations was valued in terms of its contributions towards personal betterment and leisure pursuits were seen as being both distinct from and superior to activities that produced goods and service. It is

perhaps these kinds of sentiments that have led to the view that the liberal education enjoyed by freeborn citizens in Greece is inherently superior to one focused on developing occupational capacities. A hierarchy of occupations were based on these premises. Within the hierarchy, those occupations labelled as professions enjoyed a particular status largely founded on their remoteness from menial and manual tasks, and their associations with elite cultural needs and activities. Professions could be prepared for in institutions specifically provided for this purpose. Below professions were the occupations of artists and artisans.

Hence, freeborn Greek citizens were called to a particular occupation by birthright. These citizens, particularly males, were 'called' by right of birth to engage in leisurely occupations that were aimed to ennoble them. They would not be tainted by engagement in manual tasks or in those that served material ends. It seems many average freeborn Greek citizens regarded such occupational activities as '*banausic*' and unworthy of their serious attention (Lodge, 1947). This was despite the acknowledgement that these occupations were essential to Greek society. Moreover, there was little or no room for articulation or negotiation. Aristotle, like Plato, accepted that some people are marked out to be slaves from birth:

> Thus, although farmers and artisans are necessary for the life of the state, they should not enjoy the rights of citizens. (Elias, 1995, p. 167)

Hence, for the elite, leisure activities were both their occupation and vocation. Importantly for our discussion, their values shaped the discourse, not just of this era but beyond. Yet, their valuing of different kinds of occupations was premised upon a societal stratification and set of values that most contemporary societies would find wholly abhorrent. That is, it was a society that was class based, male dominated and sustained by slavery. However, more than mere social status, there was also a belief that lower classes of individuals were incapable of higher levels of thought, including creativity. Farrington (1966) suggests that in the Platonic view that was dominant at this time, artisans were seen to be incapable of generating new ideas and 'had to wait for God to invent a solution' (p. 105) to their problems. Indeed, Plato's view was that these occupations were enriched by nature and that human capacities had little to do with the effectiveness of their enactment – '. . . nature gives the increase. Human reason does little compared with nature.' (Lodge, 1947, p. 16). So, beyond views about the standing of particular occupations and their worth, a more fundamental precept was that the capacities of the individuals who undertook this kind of work were inherently limited in terms of their contributions to practice and development, including their own. That is, their capacities were limited to what they were born with and could not be developed. This sentiment is quite consonant with Plato's views of the ideal state that distributed human nature and capacities in distinct ways across classes of citizens. Reflecting the proclivities for appetite, spirit and reason in characteristic ways, it was held that artisans were dominated by appetites and desires, and lacked the spirit of guardians and the reasoning of the ruling elite. In his illustration of these hierarchies in Plato's *Republic*, Bloom (1991) used the analogy 'sheep are guarded by dogs, who are obedient to shepherds who are in the service of owners' (p. 431). It is worth noting that teaching was ranked as

a menial task, and that although a teacher could earn a living, it was a poor living and was definitely looked down upon:

> The nurse and 'tutor' were domestic servants, and for the most part servants who were of no particular use in other respects . . . (Lodge, 1947, p. 35)

Consequently, the prospects for (vocational) education and its provision were not only circumscribed by an individual's location within this hierarchy, which was constrained by right of birth, but also by beliefs about an individual's capacity to learn and possibly benefit from educational provisions. The kind of education to fully engage in cultural pursuits was only available to freeborn male citizens and was quite distinct from preparation for the more directly instrumental activities of artisans and artists.

Given these kinds of sentiments, it is easy to understand how or why this was the case. So, just as male freeborn Greek citizens were called into a life of leisure, those born into families of artisans and artists were called to their families' work by fact of birth. Indeed, the learning and preparation for the occupational activities of artisans and artists were conducted within families that practised those occupations. The provision of education outside the family was restricted to those occupations designated as professions (i.e. medicine, architecture and military), which were catered to specifically. Yet, curiously, the preparation for these professional occupations acknowledged that there was a need to learn both the 'academic' and practical aspects of occupations (Clarke, 1971). Indeed, there were clearly different kinds of pattern of learning within the family and through formal instruction in ancient Greece.

Yet, this early kind of occupational delineation may well have led to the enduring distinctions between occupations described as professional, which are of high standing and require particular and specialised preparation, and other kinds that do not. Furthermore, beliefs about the capacities of individuals outside elite groups also have likely continued to shape views about their potential and, therefore, the work they are able to do and the development they are able to achieve. Indeed, these conceptions and practices provide an early example of how a society's privileged values have shaped the worth and standing of different kinds of occupations, and the kinds of institutional arrangements that have been used to support their learning. However, and importantly, outside these elites and within the community and families of artists and artisans, their occupations were important, delineated them from other kinds of workers, were the source of associations and were worthy of being shared across generations within their own families or kinship groups.

Yet, occupations considered to be at a lower level appear to have been denied the added component of formal instruction and its integration within the overall preparation. Instead, learning for these occupations was restricted to experiences within the family and its work activities. In particular, a child would engage in play activities associated with the family occupation before coming to engage directly with occupational tasks in increasingly purposive ways (Lodge, 1947). The provision of family-based apprenticeships are consistently reported across a range of countries, some far earlier than in Hellenic Greece. In about 2000 BC, within the Babylonian

Code of Hammurabi, it was quite customary for an artisan to adopt a son and then teach him his handicraft (Bennett, 1938). The Code required him to teach the handicraft; otherwise, the adopted son might legally return to his own father's house. As with other and later models, this approach to apprenticeship emphasised the relationship between master and apprentice as like that between father and son. It encompassed parent-like care that extended to food, clothing, shelter, moral and religious instruction, correction and punishment and preparation for citizenship, not to mention matters pertaining to instruction in the processes, the arts and the mysteries of the craft (Bennett, 1938). Similarly, indentures were used in Ancient Egypt. As early as 18 BC, the skill development for occupations comprising weaving, nail making, flute playing, writing and hairdressing are reported as being addressed through these indentures. Some of the provisions they encompassed include the following: (i) keep – provision of physical needs that would naturally have to be given to the apprentice, if he was not living in his father's home; (ii) moral, religious and civic training – through the minister and his family, through the church he attended; (iii) general education – reading, writing and sometimes ciphering; and (iv) mysteries – consisting of the secrets, rules, recipes and application of science, mathematics and art which are useful for the trade (Bennett, 1938). So, beyond the development of specific occupational capacities, these learning provisions encompassed sets of community and societal values and practices associated with being an abiding member of the community and citizen. In doing so, these purposes reflected the interests of those in power within the state.

Although the privileged view of elites denied the worth of these occupations, presumably this was not the case within the families of artists and artisans who practised and perpetuated them, using well-established practices within families and practitioner communities. Moreover, there were clear delineations between artisans and artists and other workers who were deemed to be outside such practices, and presumably of lower societal esteem and standing. For these artisans and artists and their communities, the occupations they practised were highly prized and offered the esteem of engaging in good work and developing expert workers. Such social standing is likely to have afforded status and bases for personal identity and pride in work within those communities, which, in many instances, would have been quite significant and worthy. Yet, despite the local and community esteem, Plato would have viewed such efforts as being unworthy of the efforts of free men, their preparation within family and community as being appropriate for these kinds of occupations (Elias, 1995). Also, individuals classified as artisans and artists would not be called to a life of leisure. Yet, and similarly, through their own family and kinship arrangements, it is unlikely that those individuals born outside the families of artisans and artists would be called to those occupations, unless invited to by those who practised them, paid to have access to these experiences.

These early categorisations of the worth of occupations were premised upon a particular set of societal values. The kinds of alternative philosophical viewpoints, objective analyses of the complexity of the work activities and a critical appraisal of the worth of these activities to society were absent. Such devices might have provided a more informed view of the worth of different kinds of occupations

which might have been expected of such an advanced and sophisticated culture of Hellenic Greece and, perhaps, expected even more so today. However, it is questionable whether those in positions of power would have been much interested in such advice, since it questioned aspects of the existing order. Yet, the kinds of values exercised at this time and the unhelpful and inaccurate binaries (e.g. mental versus manual labour) that were engendered still shape contemporary views about education policy and practice to this day. For instance, Aristotle advanced five categories of knowing (or arriving at the truth):

(i) *episteme* (i.e. pure science);
(ii) *techne* (i.e. art or applied science);
(iii) *phronesis* (i.e. prudence or practical wisdom);
(iv) *nous* (i.e. intelligence or intuition); and
(v) *sophia* (i.e. wisdom) (Moodie, 2002).

Of these, it is *techne* that was seen by Plato as constituting what was required for artisans and artists working with their hands (i.e. those engaged in manual work), including the playing of musical instruments (Elias, 1995). Yet, the view that only manual capacities are required for these occupations closely resembles and characterises many of the precepts that are pursued within contemporary western vocational education systems. That is, the requirements for competent work can be assessed behaviourally through observable performance (Jackson, 1993), rather than through understanding the processes of the mind that underpin this performance. In particular, the contemporary practices and conceptions of vocational education in being focused on narrow and often behavioural competency standards and competency-based training, that have become so popular amongst governments, often merely rehearse and reinforce the narrow premises and lowly standing of vocational education (Kincheloe, 1995).

However, a more considered view about the requirements of work reveals that most forms of paid work encompass all of these categories of knowing. For instance, analysis of the work of both highly paid professionals and more lowly paid production staff has shown that their work requirements (i.e. ways of knowing) would include most if not all of Aristotle's categories (e.g. Darrah, 1996). Further, such a narrow characterisation is undermined by recent studies from within cognitive science. These studies indicate that occupational experts possess bodies of domain-specific 'technical' knowledge. However, their successful performance depends on the richness of the organisation of that knowledge and the ability to use it skilfully and strategically across different situations and in both familiar and novel circumstances (Ericsson & Lehmann, 1996). Even in taking a narrow view of vocational expertise (i.e. as technical expertise), there is also a need to generate and evaluate skilled performance as technical tasks become complex and as situations and processes change, to reason and solve technical problems, be strategic, innovate and adapt (Stevenson, 1994).

Moreover, other research indicates that there is little difference in the requirement for higher-order thinking across the hierarchy of occupational activities that

are variously classified as 'unskilled', semi-skilled, skilled, paraprofessional and professional (Billett, 1994). Although workers in each of these categories of work have particular domains of knowledge, which are more or less elaborate or massive, they all require levels of higher-order capacities (i.e. *phronesis*, *sophia* and *nous*) to engage in work practices that are constantly responding to changing requirements and require making informed judgements. Interestingly, those who were nominated as 'professionals' were reported as being no more likely to be engaged in non-routine activities than those who were identified as 'semi-skilled' or 'skilled' workers. So, across these levels of occupations there was seemingly the need for similar levels of higher orders of thinking and acting which are characteristic of most of Aristotle's ways of knowing and not just comprising *techne*.

Unfortunately, these earlier kinds of views and precepts have exerted powerful influences on the provision of vocational education to this day. This includes widely held beliefs that such is the nature of non-professional occupations that measurable statements of competence can best guide goals for and privations of vocational education (Jessup, 1991). Indeed, even Stenhouse's (1975) claim that while competency-based approaches to education were quite unsuited to general education, they would adequately meet the needs of vocational education was based on such assumptions. Consequently, these views have helped sustain narrow and unhelpful sets of assumptions about the occupations that are the focus of many vocational education provisions. Indeed, regardless of whether one's occupational activities are associated with producing the goods and services that individuals want, or those of the military and rulers, they all require skilful knowledge comprising concepts, procedures and dispositions of different kinds and orders to be effective in these activities.

Moreover, it is the culturally privileged activities and goals (i.e. leisure and an antipathy towards manual work) that became and in some ways are still aligned with liberal education: a provision whose purposes are to enrich the learner rather than prepare them for a particular occupation. So, a legacy of Hellenic Greece is the creation of an unhelpful binary in educational thought and practice (Elias, 1995) that questioned the value of specific occupational preparation, except curiously when this specific preparation was directed towards elite professions (e.g. medicine, law and accountancy). Another binary division sustains this legacy: that between developing the mind (i.e. mental) and the hand (i.e. manual). It also seeks to make distinctions between preparation for a life for higher pursuits (i.e. liberal education) and one for work (i.e. vocational education). Yet, as noted earlier, Dewey (1916) proposes the opposite of vocation is not leisure, but activities that reflect indolence or capriciousness and involve parasitic dependence on others, rather than the cumulative achievement through individuals' experiences (Quicke, 1999). In some ways, this later description might be apt for the freeborn Greek elites living in a society that flourished on the backs of slaves.

In sum, it seems that accounts of what constitutes worthwhile occupations in early Hellenic society established a pattern that has been repeatedly rehearsed over time. Consistently, 'others', particularly those with powerful social interests, have advanced conceptions of and judgements about occupations, rather than those who

actually practise them. Elites know better. Following the lead established by elites in ancient Greece, aristocrats, theocrats, bureaucrats and, even, educational theorists have successively advanced societal perceptions of some occupations to the detriment of some and the advantage of others. Also, there is an enduring practice of classifying some occupations as being of low standing, not on the bases of analyses of these occupations' complexity or massiveness but on prevailing societal bias or sentiments about their worth (Steinberg, 1995). However, occupations regardless of whether they are named as professions, artisans and artists all have had particular social purposes and associations that are likely to have afforded ways for participants to find personal worth and meaning in their enactment. By degree, they all have a massiveness of knowledge that is required for the reflective practice and also require higher-order capacities to be strategic with their enactment. The key point here is that it was institutional facts – those of society – that have worked in different ways to delineate the standing of particular occupations. This valuing has extended to how the kinds of provisions for preparing workers for those occupations are to be valued and proceeded. A brief overview of some of these traditions is now advanced.

Occupations as Callings

As in Hellenic times, dominant societal interests in the European medieval era viewed artisans' work more as necessary toil than as a worthwhile activity having intrinsic value in its own right (Dawson, 2005). Indeed, not far removed from that of ancient Greece, the medieval ideal for a worthwhile occupation was associated with a pursuit of personal betterment, involving a life dedicated to contemplation. This was held in higher social regard than the world of productive work and manual labour (Appelbaum, 1993; Appelbaum & Batt, 1994). However, whether referring to these times, Hellenic Greece, or in Imperial China, the options for being called were restricted to those that individuals were able to be called to. In an age and cultural context when Christian orthodoxy comprised a pervasive set of values, the idea of work as a source of personal satisfaction or material gain in its own right was discounted. Instead, the worth of particular occupations was hostage to the judgements of those who held privileged societal positions, often theocrats. Indeed, throughout much of this time, this elitism was sustained through it being restricted to those able to read and understand Latin This capacity was unavailable to most of the population and actively discouraged in many instances. Thus, the edicts and other writings in an inaccessible language were in part used to maintain the elite standing of those who could read and write Latin. Consistent with this approach, as was the case earlier and is the case currently, certain occupations were seen to be more socially and ethically acceptable than others (Quicke, 1999). This ethic was quite distinct from earlier times insofar as it held a wider range of activities to be worthy to society. Yet, the worth of these activities was shaped by the theocracy. Indeed, in this era,

> ... some economic activities were held by theologians to be distinctively more 'perilous to the soul' than others and the more commercial the motive the more dangerous activity became. (Quicke, 1999, p. 130)

For Thomas Aquinas while

> . . . labour was noble, . . . trading more suspect and finance, if not exactly amoral, was a high risk activity from spiritual point of view (Quicke, 1999, p. 130).

Luther suggested that individuals should

> Make your gifts freely and for no consideration, so that others may profit by them and fare well because of you and your goodness. (Dillenberger, 1961, p. 79 cited in Rehm, 1990)

What constituted worthwhile occupations in these times was that judged by those privileged through the particular and powerful interests represented by the church and its holy business and restricted mainly to those which could be seen as divine callings (Hansen, 1994). The Latin root of the word vocation is *vocare* which means 'to call' – a summons, a bidding, an invitation to a particular way of life that reflected the values and business of the church. Yet, it comprised an invitation that has to be offered, in the first instance, and then taken up by individuals. The Apostle Paul, it is claimed, suggested that few individuals would be summoned in this way, yet others should 'earnestly desire the higher gifts' (Rehm, 1990, p. 115). Rehm (1990) proposes that the notion of having a special vocation arose in early Christianity when Paul used the Latin *vocatio* to indicate God's calling, bidding or summons to practise such spiritual gifts as prophecy or preaching (Calhoun, 1935 cited in Rehm, 1990). The summons was an invitation by God for individuals to demonstrate their talents, and to the level of perfection warranted by such an invitation (Estola et al., 2003). Yet, this invitation was qualified insofar as those deemed to be worthy occupations were premised on the Christian beliefs and values that dominated medieval society. Consequently, what was most highly valued in the Christian discourse at this time was restricted in its distribution and accessibility, and unavailable to those who were not called. Hence, the societal sanctioning and esteem of occupations is again emphasised here, rehearsing the idea of the privileging of particular kinds of knowledge, and being reserved for a few.

Also, as in earlier times, the relations between vocations and occupations were manifest in the different esteem they were afforded (Rehm, 1990). Occupations, offices and stations were seen by Luther to be earthly and utilitarian compared with the idea of a vocation located in performing spiritual work that was held to be exercised for the common good (Wingren, 1957). However, Luther introduced the notion that the monastic vocation was not the only or preferred way to serve God (Frankena, 1976). He proposed that whatever occupation individuals had been assigned could be used to serve God, even if this was not the direct aim of the occupation. That is, rather than accepting a particular form of work as being worthwhile and supremely moral, it was how individuals went about their activities that denoted their worth and moral standing. Here again, however, what was defined as a common good was constructed by particular and privileged views, and exercised on the basis of spiritual values and institutions: the church and its holy business. Certainly, individuals were now more able to pursue activities that they valued and not be wholly constrained by the circumstances of their birth. Yet, the exercise of this choice was still constrained by social circumstances (e.g. class, location and opportunity) including birthright.

In these ways, these institutional factors shaped what constituted worthwhile work and what occupations were valued.

However, another social fact – the Reformation – brought with it changes to what constituted ethical (i.e. worthwhile) work. This included the acceptance and worth of making profit and accumulating capital. Within religious movements, such as Puritanism, moral self-sufficiency became associated with the accumulation of wealth which was held as legitimate particularly when arising from individuals' own efforts (Quicke, 1999, p. 131). Changes in what constituted the power of aristocracy and theocracy had begun. This sentiment associated with making profit through individuals' own efforts is reflected in Noon and Blyton's (1997, p. 48) more contemporary characterisation of work as a conscious endeavour involving disciplined compliance. The change in authoritative views about work and occupations during the reformation also shifted the public discourse about work and occupations. It did this by suggesting that it was everyone's duty to treat productive work as their central life activity and perform it diligently. Here then, the bases for what constituted legitimate and worthwhile occupations were broadened. Yet at the same time, a hierarchy was being reinforced based on an external measure, the accumulation of wealth, rather than what these activities meant to those who practised them. Nevertheless, this shift opened a space for a consideration of the efforts of individuals and their agency as constituting legitimacy in the valuing of their work. The enduring concern here is, however, that the standing of particular occupations constitutes an important and pervasive statement of societal esteem which weighs heavily upon those occupations which are deemed to be less than worthy (Kincheloe, 1995; Steinberg, 1995).

However, in Europe other institutional forms came into play during this period. In contrast to earlier times, there emerged through this era institutions that represented and reflected the interests of artisans and skilled craft workers. Guilds, whose membership and interests were formed to support particular kinds of occupational practice directed their institutional efforts towards protecting the interests of their membership. These organisations had long traditions, as did other occupational affiliations such as that of stone masons that arose and were sustained through the era of cathedral building across Europe (Gimpel, 1961). These buildings took generations of workers to complete. During their construction, masons and their apprentices lived and worked together. They used a shelter on-site as a place for living, cooking and eating, as well as working in wet weather. It was also a centre for the business of stone masonry where novices could come to learn to be masons. In this era, such work settings also became one of the few sites where large numbers of workers gathered together and were in a position to share and extend their knowledge to others. Moreover, masons were one of the few kinds of workers who travelled away from the place in which they were born in the conduct of their work. Indeed, at the end of their apprenticeships, these crafts workers had to engage in day labour (de jure – became journeymen) before being accepted as masters. These 'journeymen' were able to share experiences and stories and develop networks outside the communities in which they were born and would be most likely to continue to work in.

The qualities of a family-based approach to the development of skills were central to the exercise and continuity of craft across and throughout Europe for a millennium or more. In some ways, it became the single and common approach to the development of skills, which has been contrasted to the diverse vocational education systems that emerged after the social and industrial revolutions of the eighteenth century. Once a young person became apprenticed to a master, parental authority was passed on to the master and the apprentice became part of the master's household (Greinhart, 2005). Hence, family-based craft education was marked by the exercise of authority and the direct relationship between the educator and the pupil:

> The teaching of skills, knowledge and occupational behaviour and attitude, the whole learning of the trade, this took place through personal contact between master and apprentice. (Greinhart, 2005, p. 23)

In this way, what was taught and learnt, how that occurred and the bases upon which judgements were made about the apprentices' progression were all founded in premises which are quite distinct from what was to follow with the establishment of vocational education systems in modern nation states. As is discussed in the next chapter, such systems arose after the end of feudalism and were prompted in newly formed nation states by the skill demands of the industrial revolutions, the need for young people to be (gainfully) employed and to align their efforts and interests with societal goals. In the family-based approach to occupational development, there was, however, a process of external monitoring that served to moderate the standards of work, regulate those who were deemed appropriately skilled to practise the occupation and also the advancement through to higher levels of recognition. This regulation was enacted by the guilds that existed from the twelfth century onwards in mediaeval towns and cities across Europe. They were found in communities needing to regulate work undertaken and to establish a civil basis for that regulation. It is worth noting here that in estate-societies such as what was to become the German nation, an individual was first and foremost a member of his estate, and only then a subordinate to the ruler of the land (Stratmann, 1994). Hence, affiliations to a guild meant individuals' allegiance were first and foremost to the guild and only second to the country of birth. Moreover, these guilds established and moderated standards for the domestic and family work of their members and the rules for that work. Greinhart (2005) suggests that the guilds developed a system of training through a series of stages that was quite similar to those adopted by the nobility, church and universities. This system provided an articulation for journeymen to become masters, and then on to full member of the guilds. Ultimately, these institutions expanded their scope through roles in moderating 'what is proper' into political, peacekeeping, military, religious, trading and political activities. That is, beyond a concern with specific occupations, there was an emphasis here on social order, cultural preferences and, above all, maintaining the status quo. Of course, this is perhaps not surprising for a major institution which became part of the governance of the organisation of the state and was prominent at the local city or town level.

These institutions offer an example of how the interests of particular occupations were effectively presented within the public discourse that privileged the qualities

of skilled craftwork and artisans. Yet, it has also been suggested that these guilds became increasingly self-serving and concerned with their own power and survival, often at the cost of the crafts and workers that they represented (Kieser, 1989). However, a significant change occurred in that those representing the occupation were able to legitimise and give value to the occupations that they represented. This representation stood as a distinct change from earlier times. That is, the guilds represented significant social institutions that were able to elevate the standing of the occupations that they represented.

Yet, with the end of feudalism, guilds and the kinds of arrangements they exercised were largely swept away in the social democratic revolutions that occurred across many European countries. In France, as in other countries, these guilds were seen as being an element of the *Ancient Regime* which had to be overthrown. This was because guilds had become self-serving sometimes and were also seen as being aligned with the feudal system. Nevertheless, there were other reasons why the guilds had to be dismantled. Newly emerging civil governments were particularly keen to destroy the power of the old trade guilds, as they made it difficult for governments to gain control over trade workers. In estate-societies, individuals were first and foremost members of their estate, which subordinated their allegiance to their rulers. Hence, the disestablishment of guilds was also often motivated to achieve political outcomes in nascent social democracies in the form of breaking the power of the estates (Stratmann, 1994). However, although the guilds were disbanded in Germany and Austria, they were subsequently reinstated in modified forms and controlled by the state. This reinstatement occurred as governments came to understand the important role that the guilds provided not so much in representing those who conducted skilled work, but in providing advice and support for the ongoing supply of these workers. It is perhaps not coincidental that in Germany and Austria to this day, skilled craft work of the kind that the guilds represented has the highest standing within European countries. This possibly stands testament to the importance of institutions that can champion specific occupational interests in ways that can influence the public discourse and can promote the particular requirements of the occupations they represent. Certainly, the standing of and engagement with skilled practitioners in vocational education in Germany and Austria stands in contrast to what currently happens in many other advanced industrial economies. Again, all of this emphasises the salience of relations between occupations and institutions that mediate their standings and profiles.

The process of industrialisation and the end of feudalism brought about changes, not the least being the development of modern nation states and the overturning of institutions that would threaten these nascent nation states. However, like what had preceded them, and perhaps because they are acutely aware of what forces can bring about changes, these nation states developed educational provisions which, while seeking to educate young people for economic purposes associated with their employment and in the kinds of occupations for which there was a demand, were also concerned about engaging young people with the civil society and for them to participate productively rather than militate to overturn that society. It was during this era that many of the vocational education systems in Europe were established.

As introduced above and is argued in the next chapter on the development of vocational education systems (Chapter 5), whilst much of the purpose of establishing these systems was associated with economic goals of productive companies, a skilled national workforce and concerns to address the threat of unemployment, there were also concerns about engaging young people with civil society. That is seeking to ensure that the activities and contributions of young people were directed towards the nation state's goals. Yet, there were emerging through this period other hierarchies associated with occupations that influenced the nature of work and educational provisions. Hence, it is important to briefly consider the issues associated with the enduring standing of the professions and views about the kind of education provisions that support their preparation which sets them apart and which makes having a coherent vocational education provision more difficult.

Professions Versus Other Occupations

The professions, the work that comprises them and their preparation have long been seen to be distinct from other occupations. Yet, given the shifts in the standing of work over time and across eras, it is now helpful to consider how these forms of work have come to be held as being more worthwhile than others, and the consequences for educational provisions. These distinctions have particular forms and consequences for occupations and those who engage in them, including individuals' sense of worth about occupations that become their vocations. The professions acknowledged in Plato's *Dialogues* are the medical profession, legal profession, professor's profession, theological profession and military profession (Lodge, 1947, p. 41). Some of these occupations always have been, and are likely to remain, more valued than others because they address issues that are central to human need (e.g. health, law and finance), and this privileging will occur even in countries where craft and skills are highly valued (Hillmert & Jacob, 2002). Lodge (1947) also notes that there has always been a hierarchy within these professions. For instance, in Hellenic Greece, there were doctors' assistants and physicians proper. It is likely that the role of doctors' assistants is now being taken up by para-professionals and nurses. Moreover, some of these occupations have waned over time (i.e. theology and military) whilst others have emerged as important and necessary occupations (e.g. physiotherapy). Yet, in some non-secular countries, theologians still hold exalted positions. Equally, note how the tradition of members of the British royal and aristocratic families undertaking military duties still persists, whereas their plutocratic counterparts in both Britain and other countries are unlikely to engage in military activities. It is not surprising that beyond the overall hierarchies of occupational activities, there are also levels within the professions that are subject to change and have particular emphases in particular places and at particular times. The premises for such hierarchies are a product of history, assumptions and tradition rather than an evaluation of particular attributes of work, such as the massiveness of the knowledge required to practise that leads them to be in some ways superior to others. This

prompts a consideration of what constitutes forms of high-status work and in what ways should their preparation be distinct.

As noted, the bases for discrimination of the worth of work have changed in the modernist world and have come to focus more tightly on distinctions between levels or hierarchies of occupations. Yet, as discussed above, a hierarchy of occupations has likely existed long before Hellenic times and others which are used illustratively here. Moreover, their practising is presumed to be premised on particular qualities such as ethical conduct or deep knowledge (Dror, 1993) that sets them apart from other occupations. Atop this hierarchy are the professions, yet not all of those occupations that constitute the professions are fixed. In Hellenic times, the professions included being a military officer (Lodge, 1947) though this is less frequently mentioned in more recent accounts which refer to law, medicine and accountancy as the key professions. Moreover, in recent times, the growth of occupations that are classified as professions or para-professions, particularly in health-related fields has increased, as has the percentage of those in the workforce in advanced industrial economies now engaged in professional or para-professional work (Billett, 2006).

Yet, despite these traditions the premises for what constitutes professions and in what ways they are different from other forms of work is not always clear or easily discernible, if at all. Dror (1993) far too confidently makes the distinction between scientists' focus on the production of knowledge, and technicians and artisans' concentration on practice. Beyond basing their work on deep knowledge, the professional must also be conversant with both science and practice and the transformation of science and other types of systematic knowledge into action (e.g. practice). Carr (2000) similarly proposes clear delineations between professions and other forms of work. He claims that these professions have characteristics that distinguish them from other categories of occupations. These characteristics comprise (i) an ethical value of being directed towards human well-being; (ii) their ends being contested (i.e. subject to ongoing and legitimate debate about their purposes); (iii) personal relationships (i.e. professions are characterised by an emphasis on personal relationships) and (iv) direct concern with the well-being of those for whom they work and (v) in a way distinct from other categories of occupations and (vi) autonomy (i.e. successful professional practice requires a high degree of personal autonomy). Therefore, for Carr (2000), occupations with distinct ethical values are especially suited to a preparation comprising a form of education associated with the development of a professional ethic. However, distinguishing between professional and other forms of paid work on the basis of their being related explicitly to human well-being hardly constitutes a differentiating quality. Winch (2002) counters that (almost) all occupations have ethical dimensions to their practice, not just those deemed professions. In addition, many other occupations appear to share the kinds of qualities that Carr (2000) proposes as distinguishing professional work. Other forms of work have contested ends because the nature of knowledge is constantly evolving. Occupations currently associated with graphics, printing and information technology exemplify this. Also, many other forms of work are founded on securing and maintaining personal relationships in the form of clients who value the goods and services that they access, as well as the well-being of their clients, and are often

practised with a great deal of autonomy. Equally, not all professional practice might be considered as fulfilling these criteria. Many would argue that those working in law, for instance, would offer instances of practice where the clients' interests are not always a priority. Instead, Winch (2004b) suggests,

> . . . professions are characterised by the need for, and possession of, particular kinds of knowledge, which are both abstract and practical, massive in extent, difficult to master and lengthy to acquire. (p. 181)

He proposes a continuum of professions to indicate that not all the occupations categorised as professions have the same massiveness of knowledge, nor do they require the same level of preparation. He uses this criterion to suggest that at one end of the continuum are the professions with their massive knowledge and at the other end of the continuum is 'unskilled' work, with a lower level of required knowledge. This kind of continuum is helpful insofar as it breaks down or softens distinctions between forms of work that either have or have not managed to secure the title of professions. However, such a continuum needs to be informed by other dimensions and qualifications.

In essence, Winch's (2004b) portrayal of professions as outlined above stands as a set of ideal cultural practices. Certainly, he concedes that individuals practise in different ways and with particular levels of ethical conduct. Yet, he holds that ethical conduct is not restricted to occupations categorised as professions. However, his account of professions as being based on the massiveness of knowledge required to practise constitutes a different kind of measure to make such judgements. Hence, the massiveness of the knowledge, its complexity and difficulty in acquisition that makes the professions distinct from other forms of work. Yet, the qualification here is what constitutes that massiveness of knowledge. For instance, in earlier times, and perhaps currently in less-developed economies, farmers make a range of decisions based upon their knowledge of climate, crops, history of rainfall and growth patterns of plants largely unaided by many of the artefacts and tools available to contemporary farmers. They had ways of understanding weather, crops and their growth premised on learnt knowledge accumulated over generations. Is not their knowledge extensive and perhaps massive? Similarly, with restricted technology, planning tools and access to the knowledge currently available, workers of all kinds have generated durable and high-quality products, that are premised on an amount and a complexity of knowledge and its learning over time.

It is necessary, therefore, to elaborate further the continuum of occupations that Winch (2004b) proposes to include the variations that arise from particular instances of occupational practice. For instance, situational requirements may enhance or reduce the massiveness of knowledge required for practice. Medical specialists who perform lots of important, but, routine activities may well rely less on the massiveness of their knowledge than their particular and very narrow set of specialist knowledge. Moreover, specialists engaging in complex and non-routine medical procedures are also likely to have quite distinct forms of procedural knowledge. Alternatively, a less-esteemed form of occupation might equally rely upon a massiveness of knowledge required for effective work practice. An example of this is

non-routine tasks conducted by those involved in complex problem-solving activities such as the diagnostics undertaken by motor mechanics, hairdressers or builders (e.g. Darrah, 1996). The automotive mechanic working in a small garage in a rural town, dealing with a range of vehicle types and brands and addressing a range of automotive engineering tasks might also have a massiveness of knowledge, which is very different from those working on routine activities with new vehicles in a dealership. Therefore, by itself, the amount of knowledge that is required to perform a task, while useful, does not clearly delineate professions from other kinds of work.

Third, the personal attachment of an occupation for individuals, that is what it means to them, is likely to shape how they go about practising that occupation, and the degree by which they actually engage with the scope of knowledge required by somebody practising that occupation. As well there are the personal capacities of the individual to effectively conduct the occupational practice, because interest and attachment alone will be insufficient. So, relying upon a continuum of occupations as cultural ideals denies the overlap arising from distinct, but differentiated situational requirements of the occupational practice that may shape (i.e. reduce or extend) the massiveness of knowledge required, the diverse levels of interest and attachment that is held to characterise the professional practice and the level of capacity required to enact such a practice.

It seems plausible to build upon Winch's (2004b) critique of Carr (2000) to further extend the particular attributes that are ascribed to professions, but may well be equally applicable across a far broader range of, and perhaps all, occupations. This consideration includes situational factors associated with practice and individuals' engagement of that body of knowledge. Therefore, in shifting from occupations as cultural ideals to situated practices that are enacted by individuals, it is necessary to emphasise the role that both situational and individual factors play in the enactment of the occupation.

Importantly, the discussion of what constitutes professional work and its consonance with other kinds of work suggests that while there may be some quantitative and, possibly, qualitative distinctions in the kinds of knowledge that are utilised by workers labelled professionals from others, in essence, they are all the same. Moreover, the analysis in Chapter 6 suggests that like all forms of work, there are dimensions of conceptual, procedural and dispositional knowledge that exist both at the canonical level of the occupation and also at the situated level of practice which provide important educational goals for preparing people for that occupation and then sustaining their competence across their working life as the requirements for practice change. The point here is that, regardless of the social standing of occupations, the knowledge that is required for performance is of a similar kind. Moreover, the differences in developing the kinds of knowledge required for specific occupations will be dependent more upon the degrees by which the particular combination of conceptual, procedural and dispositional knowledge requires particular interventions for its development.

Beyond the public discourse associated with different kinds of work is another – that associated with perspectives from academic disciplines. In particular, discourses from the field of education and the philosophy of education have served as a barrier

to the standing of vocational education and its project. In short, this scientific discourse appears largely derived from the same sources as the public discourse, that of privileged occupations and societally esteemed activities. Thus, the manifestation of the ideal form of education is primarily about the development and betterment of humans, which can only be realised through a form of liberal education that emphasises cultural enrichment, not applied learning.

Conceptions of Occupations and Education

In sum, the evolution of the conceptualisations of occupations advanced above emphasises them as practices that have historical, cultural and social geneses. Further, the very characterisation of those occupations has largely been shaped by socially privileged voices, much less so than by those who actually practise them. Part of these discourses suggests that the inherent capacities of those who practised less-prestigious occupations were quite limited. That is, such workers were incapable of problem solving, generating new ideas or managing new situations, thereby raising questions about the worth and form of any educational provision for them, let alone having a say in the form of education that would support that provision, outside of it being a family enterprise. That is, the decisions about the standing of work, the provision of preparation and how this might progress were largely made by powerful others (i.e. aristocracy, plutocracy, theocracy, technocrats and bureaucrats), but rarely by those who practise, a state of affairs that remains to this day. Importantly, in Mesopotamia, Hellenic Greece, Imperial China and medieval Europe, these skills were prized by the people who practised them and the communities that utilised them. Indeed, this was also the case later in cities of the industrial era or in contemporary workplaces. In each of these eras and locations, strong traditions of craft were upheld and sustained by the communities and members that exercised and extended them, just as today. In coalmining communities, for instance, the expert and respected coal miner has a status that is sometimes greater than the professionals working in those communities. However, many others outside the communities would view mining work as lacking this worth and would also perhaps question the high salaries paid to such workers. In these ways, workers and their communities represent a significant social fact. Over time, it has been workers' activities, talents and genius that have developed work practices and sustained and transformed them as requirements changed, even though they are typically not at the forefront of societal interests and esteem. Hence, these communities, their practices and these practitioners are important social facts, sometimes only engaged with romantically by such elites.

The case made across this chapter suggests the following in terms of vocational education.

Firstly, as with vocations, it is necessary to consider occupations from both a personal and a social perspective. That is, there will be societal interests in what constitutes an occupation, but also personal imperatives in terms of individuals selecting

an occupation, their preparation for it and how it meets their needs throughout their working lives.

Secondly, key institutions and socially privileged voices have played a significant role in shaping the standing of occupations and their preparation. In particular, much of this has acted to work against the interests of many of the occupations that are deemed inferior to those of the professions and are served by vocational education. Consequently, it is necessary for assumptions underpinning some of the views about the standing of vocational knowledge to be challenged.

Thirdly, there is need to go beyond narrow and technicist views of occupations, and for there to be a broader consideration of the capacities that are required to practice occupations, and the means by which these capacities should be initially developed and sustained throughout working lives.

Fourthly, it is important to avoid assumptions that individuals engaged in different occupations have inherently distinct capacities for practice and further development. Instead, it should be assumed that all workers in all occupations possess the kinds of knowledge, including higher orders of thinking and acting that provide the platform for engaging in new activities that require creativity, and that this ab9ility extends to their capacity to benefit from educational provisions and opportunities.

Fifthly, given the key and important role of occupations in being the calling for an individual, vocational education should include and embrace assisting individuals to identify the occupation they are suited to, both in terms of their sense of personal identity and also their personal capacities, interests and qualities.

As discussed above, over time, the concept of occupations has been beset by unhelpful binaries of leisure versus vocations, professions versus vocations, head versus hand, etc. which have all had legacies in terms of conceptions of, and understandings about, paid work (i.e. occupations) and, as a consequence, decisions about the educational provisions that are used to prepare individuals for occupations and then sustain their capacities across a working life. In particular, factors that

(i) de-emphasise the value of human activities that comprise occupational vocations per se;
(ii) make erroneous and unhelpful distinctions between occupations emphasising the mind over the hand and placing the latter below the former; and
(iii) make unhelpful distinctions among them (e.g. mental versus manual)

offer barriers to conceptions that seek to position occupations more objectively and to portray them as viable vocations in their own right, rather than as inherently subordinate or beholden to others.

The risk here is an unhelpful and limiting conception of some occupations, and those who practice them. Thus, some occupations have been labelled negatively (e.g. unskilled, semi-skilled and sub-professional), being seen erroneously as concerned only with *techne* or technique, rather than with a broader range of capacities as expected in other occupations. Consequently, vocations need to be conceptualised, categorised and evaluated in terms of responding to and fulfilling cultural

needs, albeit in particular circumstances and situations, and their meaning for those who engage with them. As has been argued above, qualitatively there are no clear distinctions between what is often labelled professional work, and other forms of work. They both require conceptual, procedural and dispositional capacities at a variety of levels. Also, all forms of work likely require the capacity to be strategic, to monitor practice and to engage in effectively negotiating circumstances and issues that have not been encountered previously (i.e. non-routine problem solving). Of course, quantitatively, some occupations will demand a greater scope of knowledge (i.e. massiveness) than others, but some circumstances demand that workers have a greater range of knowledge, regardless of the kind of work they are undertaking.

This latter emphasis is important because it is human actors that are essential in shaping the enactment and transformation of occupations as vocations, and through their agency, negotiating with and acting against societal prejudices and values. More than merely enacting socially prescribed concepts and practices, human actors are engaging in the active process of remaking and transforming these practices. These enactments are shaped by the personal: individuals' conceptions, agency and energies. Importantly, in progressions through plutocracies, slave societies, theocracies, aristocracies and governmental mandates the acknowledgement of the sovereignty of individuals' interests, agency and role in an occupation's practice and transformation has gradually emerged, albeit inhibited by setbacks and diversions that are still played out.

Having considered and discussed the concept of vocations and occupations which are both the stated focus of and concerns for vocational education, the next chapter considers how these conceptions translate into the diverse purposes for vocational education and how these forms might be translated into educational action. In particular, the discussion above draws upon historical sources and precedents that concluded with the drift to modernism and rise of industrialisation and democratic nation states and the destruction of feudalism. One key feature of changes that arose through this period was the formation of vocational education systems in many European countries, to be followed by counterparts in the United States, Asia, Oceania and elsewhere. The following chapter discusses and elaborates these developments. It examines how issues of the discourse, engagement with workers and forms of vocational education built upon concerns to maintain and address powerful interests whilst also meeting the needs of communities and individuals whose aspirations and potential to realise personal and goals had also been changed by the establishment of nation states and the end of feudal society.

Chapter 5
Development of Vocational Education Systems and Fields

> *. . . the relationship between vocational education and training and the neighbouring societal subsystems, especially the employment system and the general education system, which varies from country to country, and to the traditions and mindsets that have grown up in these fields in the individual countries.*
> *(Lettmayr, 2005, p. 1)*

Formation of Vocational Education Systems

This chapter seeks to set out how the key of vocational education as a field and system of education has developed and been organised as a result of industrialisation and the formation of modern nation states. In particular, it considers how the vocational education sector developed through the needs of emerging nation states to (a) manage the effective supply and provision of skilled workers as a result of the decline of family-based processes of learning and the new requirements of modern industrial economies; (b) organise provisions to assist young people become employable; and (c) engage workers in a way which would achieve a nation state's social and civic goals. In contrast to the uniform process of family-based, apprenticeship-type arrangements enacted across Europe in the previous millennium, there emerged in each country quite distinct vocational education systems whose form and organisation were framed by the particular institutional, social and economic imperatives. These same societal and economic transformations also generated growth in the range of occupations classified as professions, and whose preparation was seen as being required to be quite distinct (i.e. institution based) from that of other kinds of occupations. The growth of university-based provisions of vocational education that resulted from this imperative has continued and has become the central element of contemporary higher education provisions. Yet, the development of nation states and their desire to organise and manage social and economic activities also saw a growth in the power and interventions of state bureaucracies. Through these bureaucracies, governments and their nominated spokespersons from industry and the professions have become the latest in a long

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line of socially privileged voices that shape the provision of vocational education both as a field and as a sector. Increasingly, the adoption of mass vocational education systems and also the growth of the field of vocational education are now premised on the powerful voices of the state and its nominated spokespersons. However, as in earlier times and with earlier regimes, the degree of engagement and decision-making by those who practise is very much premised upon their ordering in the societal hierarchy. That is, in many situations, those who practise and those who teach particular occupations are granted few opportunities to contribute to decision-making about the organisation of vocational educational provisions.

The chapter commences with a consideration of how the impact of modernism and industrialisation shaped the formation of vocational education systems, albeit differently across countries. The ways in which the particular complex of institutional, social and economic factors shaped the development of vocational education systems across a range of European and other countries are provided to illustrate this. It is next advanced that through this period, the extent and power of the bureaucratic control of vocational education has progressed as nation states seek to address particular social and economic goals. Indeed, elements of organisation and control have come to position the field of vocational education as both a key education sector and also an element of public policy provisions.

The Impact of Modernism

Modernism and the key economic and societal changes that occurred particularly in the nineteenth century had a profound impact upon a range of institutions including work, workers and education for work. In particular, a significant impact of modernism was that state intervention in many aspects of public life increased, including that in education, and arguably particularly in vocational education. Accompanying this modernism was a rationality that was applied to all state activities and means of administering their provision, such as education. Accompanying this rationality were analytical processes that sought to reduce all aspects of complex phenomena into their constituent parts and study them in isolation, and, through this process, generate policy responses. The same measures of hyper-rationality that were applied to the physical world were also applied to the social world of governance, education and learning (Kincheloe, 1995). These kind of measures did much to shape considerations of work and its preparation, from this time forward, albeit expressed more strongly in some disciplines (e.g. economic and social efficiencies) than others (e.g. psychology and sociology). These measures had a profound effect upon vocational education, which was seen to have particular purposes associated with developing skills, engaging citizens and developing capacities for a civil society and as a means to replace the previous family-based provision of occupational preparation that had been disrupted and largely discontinued as a result of industrialisation. Yet, this rationality was still shaped by societal views that distinguished amongst different kinds of work and workers.

Accompanying this emphasis on rationality during the eighteenth and nineteenth centuries in Europe, the public discourse about the worth of occupations had already evolved to emphasise the contributions and perspectives of those who worked. Paid work seemingly became an increasingly central component of the societal discourse about human worth and dignity. The idea of daily work as a divinely endorsed vocation was central to the concept of the so-called Protestant or Puritan work ethic, for instance. This sentiment found its fullest expression in the work of the theologian John Calvin (Dawson, 2005, p. 224). Calvin believed that the purpose of work was to reshape the world in the fashion of the divine kingdom. Through individuals' dedicated labours they could prove their worthiness to that kingdom. Indeed, Bernstein (1996) claims that Calvinists unwittingly defined and gave credence to commerce through it being given an unprecedented and moral sanction. The concept of vocation, for instance, at this time came to reinforce the idea that a human being was essentially and primarily a worker and that work was a primary sphere in which the ultimate human expression and fulfilment could be achieved (Dawson, 2005). In this way, vocation and occupation in the form of paid work come far closer together than in previous societal discourses. Through this period, engagement in work and the importance of work, its social standing (more so in some cases than others), replaced the idea of vocation as a contemplative or leisurely field to be pursued, or the exercise of a common good. Indeed, this latter quality began to manifest itself as the characteristics of a particular kind of reified work: the profession. Now, personal productivity and securing profits came to be seen as proof of spiritual accomplishment, rather than impediments to it.

Here, distinctions are sharpened between modern and pre-modern societies in terms of how the relationship between individuals and society is conceptualised. Both Meade (1913) and Dewey (1916) distinguish between the conduct in earlier societies where moral compulsion came not primarily from the individual, but was pressed upon individuals by external forms and forces and were strictly adhered to, and modern society in which individuals are more aware of their own agency. Hence, it follows that in emerging modernity, human reflexivity (i.e. the capacity to critically reflect upon one's own circumstance) and individualisation (i.e. a focus on the needs and cognising qualities) were exercised in breaking down traditional structures (e.g. aristocracy, the extended family, the church and the village community) which were held as impediments to progress. However, these kinds of social structures and institutions were replaced by new ones (e.g. the State, the nation, the nuclear family, capitalist economy and science). For instance, in France, the *Grande Revolution* signified a shift from a consideration of subject to one of citizen. These served to shape the lives and subjectivities of individuals, and lead to the development of technicist and bureaucratic institutional forms (Quicke, 1999).

Consequently, through these changes, new forms of social ordering came to shape the nature of work and individuals' conception of it and its standing (Kincheloe, 1995). In essence, the mode of work within modern capitalist society is the antithesis of the moral tradition of work, as expounded by the church in earlier times. Indeed, to some degree, this change is what Marx sought to secure. Moreover, and in particular, doing work for someone else and in a social relationship with

somebody else having control over workers' labour is quite counter to an earlier set of beliefs about work. Yet, these circumstances became the facts as social changes associated with industrialisation came to transform not only how people worked, but also their communities and societal status. Within the capitalist mode of working, individuals became estranged from the conduct and organisation of their work and lost control over its conduct (Braverman, 1974). This condition was held to be particularly true for those who worked in factories and, in particular, for those workers who had moved from cottage-type work, in which they had responsibilities for and discretion about their work, into factory organisation where responsibilities were usually prescribed by others. Indeed, the decline of the cottage industry saw the realignment and subordination of artisans' discretion and work organisation to only that permitted when supervised in factory settings and organisation. It also saw the decline of the traditional family-based approach to the development of skills that arose from either an actual or social contract between the skilled worker and the learner that occurred essentially in loco parentis. Moreover, within both capitalism and the liberal philosophies that underpin it, individuals are placed in competition with one another which stand to constrain the viability of the community in which they live and work. Yet, among others, Quicke (1999) suggests that these claims are perhaps overly strong, and that the dispossession and deskilling to which Braverman (1974) refers were indeed overplayed. Indeed, human reflexivity asserts itself upon these new kinds of structures, and the strength of the suggestion and control exercised by such institutions is still mediated in some ways by both the sentiments, agency and values of individuals and their communities. The negotiation between the social and personal imperatives is seen as being continually rehearsed through the transition to modernist society and then within it. However, less controversial is that the principal mode of skill development that had served in many European countries for a millennium or more was now almost extinguished, by the shift from family-based production into factory types of productions and the imperatives that arose within a more intensely competitive economic environment.

Certainly, some commentators suggest that a view of work has been deliberately created to enhance the capitalist position, and these offer an ethic for workers to engage in productive activities which ultimately serve the interests of those in control of capital and who employ (Dawson, 2005). Such a view is aligned to the idea of false consciousness as advanced by Marx. That is, workers have been duped into developing a false consciousness through which they are fooled into seeing their efforts and their work activities as being purposeful. Such an act of self-exploitation is held to be underpinned by the hegemonic activities of those who seek to propose that a vocation is constituted along the lines of the Protestant work ethic (Bauman, 1998). However, whilst not denying the power of dominant social sentiments as expressed by powerful discourses throughout history, there are elements of the false conscious argument that are seemingly self-serving and unconvincing. That is, if individuals are disaffected by their work and work contradictions, for whatever reason, they are held to be socially insightful and critically engaged. If, however, workers engage with their work with interest, do so effortfully and come to identify with it and secure personal satisfaction and a sense of self associated with that

work, then they have been duped into self-deception and possess a false consciousness (Quicke, 1999). Such propositions position individuals as being without agency and reflexivity. Indeed, critics of Braverman (1974) and others who suggested that workers are powerless to resist the social suggestions are reminded by Dawe (1978, cited in Knights & Willmott (1989) that

> In every testimony to the experience of the humanising pressures of modern industrial society, there is also a testimony to a contrary sense of self, of personal identity, of being human; of what it is or might be like to be in control of our own lives, to act in and upon the world, to be active human agents. So, in the name of our personal identities, our personal hopes and projects and longings, in the name of ourselves, we resist. (pp. 535–536)

This sentiment also applies to other kinds of social movements that have shaped the nature of work, how occupations are to be valued and individuals' engagement with their work. Certainly, the rise of modernism developed and privileged specific form of rationality through its emphasis on science rather than superstition and this has been applied to the enactment of paid work with a particular concern about efficiency in its organisation. This rationality is perhaps most prominently captured by the Scientific Management movement founded by Frederick Taylor. To secure greater efficiency in work activities, usually in factory-style work settings, this movement aimed to break work roles into small tasks that could be easily learnt and managed, thereby eroding the concepts of occupations, occupational knowledge and identity. These were to be replaced by a model of work organised around components or sub-elements of such an occupation. Kincheloe (1995) notes that managers within General Motors boasted that there was no job in the manufacturing of automobiles that would take more than 15 min to learn.

> The sacred goal of efficiency could be guaranteed by defining job tasks in such a way that any fool could perform. If workmanship and morale were poor, all managers had to do was to increase supervision and control. (Kincheloe, 1995, p. 5)

This approach to work organisation was extended from manufacturing into other institutions such as hospitals and even proposed as a model for how schooling might best be ordered. Indeed, this kind of rational logic has resonances with the contemporary ambitions of some employers and employer organisations for the organisation of vocational education across a range of countries (Lum, 2003), through highly standardised and modularised curriculum measures. However, the Scientific Management movement led to approaches to work organisation that undermined not only the existing ways of working but also engendered other unintended legacies that were antithetical to the overall goal of highly efficient and productive workplaces. These legacies included a reduction in creativity, self-expression and connection with the work process and completed product, let alone the satisfaction that might arise from that work, and engaged workers in effortful work activities. All of this was unhelpful when new work skills were required and when workers were supposed to exercise their capacities to learn new practices. That is, these measures severed the personal interest and identification which had long been aligned with occupations as vocations. As this model of work organisation fragmented and degraded the meaning of work for those employed to do it,

it is perhaps not surprising that the Ford Motor Company had a 370% turnover of staff in 1913 (Kincheloe, 1995, p. 5). Such an approach and such levels of turnover may well be acceptable within the scientific logic underpinning this movement, and when there is a surplus of labour and work tasks can be engineered in ways that little human decision-making and discretion are required in their execution. Yet, this is not always the case, nor is it likely to be a characteristic of work in modern and post-modern times. For instance, to achieve high-quality products, to respond to the constant changes in market requirements and to manage tight labour markets mean that the creative and agentic qualities of workers, their sense of occupational identity and engagement are now central to the conduct of effective work including in factory settings (Rowden, 1997). These emerging requirements suggest the importance of rich domain-specific (e.g. occupational) knowledge and the capacity to be adaptive to change and, most importantly, to possess the kind of capacities that can bring about that change.

Again, powerful external interests in the form of industry consultants and powerful and willing industry partners applied particular viewpoints in appraising and reshaping the occupations of others under the rubric of a scientific (i.e. logical and rational) approach to work organisation. These interests exemplify what Marx predicted would occur under capitalist modes of production – the alienation of the individual from the process and products of their labour. Yet, such interests seem to have failed to engage with, understand the perspectives of and act in the interests of workers who were fulfilling these occupational roles. In essence, Scientific Management asked workers to accept the worth of their work in ways that were reminiscent of intensely hierarchical slave or feudal societies such as Hellenic Greece and Imperial China. Moreover, this approach is quite contrary to what is required for workers who are citizens of modern social democracies. Hence, many contemporary forms of work organisation have taken almost the opposite view of what Scientific Management proposed and, instead, often seek to expand job requirements and enrich bases for engagement in work. As Kincheloe (1995) notes, it is hardly surprising that the community would not value such forms of work or work organisation, nor would it wish to support training programmes that serve to support these, except when it was applied to others, and other people's children. Therefore, as in earlier times, the conception of what constitutes worthwhile occupations is in some ways aligned to the societal conditions in which those occupations are enacted. Indeed, it is societal perceptions about the worth of work and the worth of particular kinds of work which seem to shape not only its standing as a worthwhile practice to engage in (Cho & Apple, 1998) but also with the kinds and nature of educational provision that it deserves. All of these factors are indicative of the growing acknowledgement of the need for workers to value and find meaning (i.e. vocation) in their work activities, albeit, more so for some prestigious forms of work than for others.

As foreshadowed, the rise of industrialisation and the collapse of the guilds also disrupted and overturned an essentially uniform provision of practice-based occupational preparation occurring in families and family businesses that had established itself in European countries over the preceding centuries (Greinhart, 2002). Certainly, in some situations, with the development of social democratic nation

states in Europe, other unions of workers began to represent the voice of skilled workers and artisans, albeit often more for industrial reasons than the standing of their practice. Indeed, while the delineations of these unions of employees were often about particular kinds of work, their function and organisation was largely focused on industrial issues, such as improvements in pay and conditions, and less on advancing the standing of the occupational content of their work. Moreover, as these industrial arrangements have developed, unions of workers and employers have often been engaged in contested negotiations about the kind and demands of work that comprised these occupations. Particularly in the twentieth century, it has been difficult to champion the complexity of workers' skills and issues of vocational education outside these negotiations. The formation of trade unions that advocated for particular kinds of workers delineated their particular forms of work and used them as a collective device to organise and apply collective power (Braverman, 1974). Management strategies to exercise total control over the production processes by making work tasks discrete, narrow and easy to supervise were countered by union-organised demarcation that exercised a powerful and collective voice. However, as suggested above, much of the emphasis within these collective efforts were directly aligned with industrial negotiations centred on wages, conditions and hours of work, and often far less so on the occupation, except when issues of demarcation arose. In these ways, the needs of skill development and the key interests associated with skill development became subservient to industrial issues and processes.

Yet, changes also occurred to what constitutes the professions and the work that they involve. Indeed, as discussed in the previous chapter, across the nineteenth and twentieth centuries, professions have come to be characterised as distinct and important, and are now growing significantly as a segment of the available work. This kind of work is seen to represent work that is worthwhile, desirable and in many ways quite distinct in its standing from other kinds of work. Perhaps this is not the least because in times of increasing managerialism, the professions offered occupations in which individuals could make their own decisions and be self-regulated to a large degree. So, while having cast off rigid requirements of birthright, and the values associated with worthwhile work being constrained to those which are contemplative, liberal and spiritual, the concept of worthy work still remained with the socially privileged perspectives and the activities of the professions. However, there is still a sentiment that professional work and the individuals who engage in it have particular qualities in terms of their capacities to engage in generating new ideas, in thinking strategically and, perhaps but most crisply, in having higher order capacities. That is, the hierarchies of work are not just premised upon the nature of that work, but in views about those who undertake that work having a particular range of capacities that, if not wholly fixed, are quite difficult to change. This sentiment, of course, has a significant impact on discussions about the form that educational provisions for different individuals should take. In particular, the enhanced standing of the professions in the public discourse that arose through this period reflects a strong social sentiment that influences the valuing of other kinds of work and other kinds of workers, and has justified differences in the approaches by which education for particular occupations were advanced.

The Formation of National Vocational Education Systems

A range of educational measures were taken up by states as responses to both the industrial and social revolutions that occurred during the nineteenth century. A particular response was the development of vocational education systems and their evolution into distinct educational sectors. Through this period, the term vocational education acquired a very particular meaning (Aldrich, 1994). Earlier connotations of vocations as selfless service to God and the human race and as the exercise of independent judgement in the performance of vocational duty were displaced during this period. In its place, vocational education became a term generally applied to a range of low-status occupations – for example, bricklayers, hairdressers, mechanics and the like. Aldrich (1994) claims that vocational education

> . . . is commonly equated with training, rather than with education, the acquisition of the required degree of proficiency in a skill or a set of skills of a manual nature. (p. 42)

Yet, a key point of distinction between this and other sectors of education, which were of reasonably uniform structure across societies, was the diversity of the vocational education systems that evolved through the nineteenth century, and whose legacies have lasted until contemporary times. Similar transformations in different Europe countries brought about by technological, social and governance changes led to quite distinct vocational education systems. Indeed, current reforms in the European Union are directed towards securing uniformity in process and outcomes across disparate national vocational education systems. Yet, these differences reflect

> . . . the relationship between vocational education and training and the neighbouring societal subsystems, especially the employment system and the general education system, which varies from country to country, and to the traditions and mindsets that have grown up in these fields in the individual countries. (Lettmayr, 2005, p. 1)

The point here is that rather than viewing these systems as being merely different in an ad hoc way, they reflect particular societal imperatives and institutions at the historical moments in which they were formed and then transformed over time. European education systems have demonstrated considerable structural and developmental differences as influenced by their particular national political systems and modes of regulation, distinct economic and labour market structures and cultural traditions (Green, 1994). These traditions, which reflect their particular pathways to modernism, appear to continue to play key roles in how these systems develop despite efforts towards unification and standardisation (Hanf, 2002; Greinhart, 2005). As Hanf (2002) notes:

> Looking back 500 years we see common origins in the old European cities and guilds; 200 years ago we see the crisis of the traditional structures in the wake of the industrial revolution and 100 years back we see that the divergent national systems take place. (p. 11)

The development and their differences within these systems included the formation of state-sponsored vocational education provisions and systems to address the supply of skills, meet the needs of young unemployed people and engage them within civil society. Indeed, in capturing the differences across these systems, Greinert

(1988) distinguishes amongst three models of vocational education characterised as the 'school model', the 'state-directed model' and the 'market model'. The school model comprises an initial vocational education provided through the state school system, as in France. The 'state-directed model' comprises the engagement by the state with enterprises and training providers. Germany is seen as being the exemplar for this model. The 'market model' is that largely organised without direct state involvement, with enterprises taking the lead role and initial vocational education being premised on an efficiency model. The British approach is included within this consideration. Certainly, the various provisions organised in European states were shaped differently according to societal arrangements and facts. For instance, Germany and Austria formed vocational education systems with alignments to some of the existing institutional arrangements (e.g. re-formed guilds). The Finnish system's development was shaped partially by its being a vassal state to Sweden, the collectivism of Nordic societies and also an independence from those sources outside family and close affiliates that is contrasted with German values of the artisan as citizen and entrepreneur.

Towards the end of the nineteenth century, the German state took an active role in vocational training by establishing a legal framework within which it was supported (Stratmann, 1994; Deissinger, 2002). The *Handwerkerschutzgesetz* (i.e. Craft Trade Workers' Protection Act, 1897) and policies favoured the development of small to medium-sized enterprises. In 1890, the formation of chambers of trade as public boards attempted to reinvigorate the guild-based vocational training system, yet with vocational schools providing a more liberal focus for the education of young people. However, it was the failure of these *volkschules* that led to Kerschensteiner's suggestion to transform this kind of schooling into an education provision based on learners' occupations (Gonon, 2009b). He was aware of developments in industrial vocational training, especially in the German-speaking countries of Europe, but he was also interested in what was happening in France and England, which he had also visited. An outcome of the report of his travels and deliberations – *Observations and Comparisons* – was an approach to education which aimed to secure a model of middle-class occupational identity and loyalty to the state, which was consistent with the conservative values of the time and which met German needs for stability (Greinhart, 2005). Indeed, by the beginning of the twentieth century, vocational education gained a particular role in managing youth. Apprenticeship certificates were used to show vocational education as a way of leading to social usefulness and reliable citizenship (Stratmann, 1994). Vocational education became a school for the nation, after *volksschule* and before the military, and, through giving it these functions, it became important to the state.

In these new arrangements, the personal and family-like relations in the workshop were to be replaced by a more reliable training offered by a pedagogically qualified master or *meister* (Stratmann, 1994). Instead of the relative arbitrariness of the family-based occupational training provision, teaching was to be operationalised by this *meister* and structured by a curriculum and evaluated by examinations. Thus, two logics were utilised in these new arrangements: the logic of education in the sense of old European role of family and the logic of training according to the

modern and rational criteria (Stratmann, 1994). These measures sustained the survival of *Meisterlehre* (i.e. apprenticeship with a master craftsman) and the strong place of the *Berufsschule* (i.e. vocational school) from the end of the nineteenth century. These measures were supported by a conservative societal concern to retain the traditions of skill formation. This sentiment drew on a powerful legacy associated with the notion of work as a craft. As well as being associated with expertise in the use of occupational techniques and practices, the legacy extended to how skilled craft workers conduct themselves. Greinhart (2005) suggests that such was the strength of this sentiment that craft workers were concerned about compliance to traditional frameworks of practice to the extent that adherence to these was more valued than individual competitiveness. Indeed, the provision of vocational education in Germany came to enjoy strong legal, institutional, economic and cultural foundations that drew upon and extended long-standing traditions (Frommberger & Reinisch, 2002). In short, with industrialisation and the establishment of large manufacturing units, apprenticeships were increasingly undertaken outside family environments and this broke the moral dimension of the contracted arrangements between master and apprentice which underpinned craft training (Greinhart, 2005). This change in provision of craft training ultimately led to a crisis in vocational training which required the state to intervene and establish a vocational education system. Yet, more than merely focusing on skill development, the system was also concerned about meeting societal goals associated with reducing unemployment in youth and also engaging young people with civil society.

Similar developments occurred in Switzerland, albeit in different ways across the German, French and Italian speaking parts of this country and as influenced by its canton system of governance (Gonon, 2002). As with some other European countries, it was towards the end of the nineteenth century that a systematic approach to the preparation for skilled workers was adopted. National legislation in 1884 provided both subsidies and administrative foundations for a systematic apprenticeship system. Yet, Switzerland's approach was distinctive in that general education in schools sat alongside occupational preparation for apprentices, in both workplace experiences and training centres that augmented in specialised ways apprentices' occupational knowledge. So, rather than having a dual system, the Swiss adopted a triad of institutional bases for apprenticeships. Gonon (2002) claims that both industrial organisations and political parties demanded that the state intervention was required to both preserve traditional apprenticeships and modernise the approach which until this time, like elsewhere, was primarily based on service to a master. Further provisions within the existing training schools and also the establishment of specialist training schools and training workshops would provide a level of preparation in the classroom that was not available through service to a master. Curiously, these developments are reminiscent of what occurred in professional education in Hellenic Greece where, for instance, the training of medical practitioners needed to be augmented by school-based processes because there were not enough experienced practitioners for apprentices to work alongside (Lodge, 1947).

What is unique and seemingly quite prescient about the Swiss approach was the introduction of the third learning environment that was introduced specifically

to combine the advantages of both on-the-job training and classroom learning. It seems that this option arose through a national debate about whether to transform vocational schools as educational institutions or to transform workplaces into places of instruction. There was a considered and deliberate pedagogic goal here associated with providing work-related knowledge in a systematic way. However, the goal was also to provide an environment in which there was the opportunity for students to engage in trial and error, and practise. Such provision, including opportunities for repetition and reflection, could occur in circumstances removed from the direct demands of production. Yet more than being wholly technical, the discussion in Switzerland extended to having a vocational education provision that inculcated the value of personal industry. So again, issues of avoiding idleness and lack of applied engagement with work featured as an impetus for this particular set of arrangements. Another feature that Gonon (2002) identifies is modelling processes that are found in agriculture, as a means of inculcating values of personal industry. He notes the concern was to make school more like farming. Perhaps this is not surprising in a country that still had an extensive agricultural sector and where the virtues of farm life were seen to be in some ways superior to that of urban life. There was another element of the Swiss state interventions which is most noteworthy. Through national debate it was acknowledged that, in itself, reforming, reorganising and developing further the educational system would not lead to the improvement of experiences for apprentices. What was required was the raising of the status of their work. Moreover, there was a realisation that much of achieving the goals for an effective vocational education system would need to be premised upon activities at the local level. Collectively, and reflecting upon how the state interest in vocational education has played out in so many countries, these considerations appear to be remarkably well considered, prescient and forward looking.

Apart from concerns about avoiding idleness and engaging young people in civil society, what also sets the German, Austrian and Swiss systems apart from others is the commitment to the training of apprentices by enterprises, and the resources enterprises commit to this activity. Whereas the outcomes of state interest and control of vocational education in nearly all other countries have led to an increased emphasis on the expenditure of public resources, and a seemingly grudging engagement by those enterprises who ultimately employ apprentices, in the German speaking countries, the arrangements are quite distinct and reflect a shared responsibility for the initial vocational preparation of workers. One factor which might sit behind this arrangement is that the retention of craft institutions sustains both the standing of the apprentices' and trade workers' occupational identity whilst being seen to provide a preparation which is informed by and responsive to employers' needs.

Because the success of industrialisation was achieved without significant contribution from education, in Britain, the belief grew that preparation for the world of work was best undertaken through work rather than in educational institutions (Roodhouse, 2007). It seems that factors associated with natural resources (especially water power, coal and iron); rapid population growth (which expanded both the domestic market and labour supply); a monopoly in copper production; technical

ingenuity; the economic activity of groups excluded from political power (particularly Protestant Nonconformists) and political stability were central to the British success in the first industrial revolution, rather than education or having educated workers (Aldrich, 1994). Since the decline of the guilds in Britain, the traditions of apprenticeship had been imperilled, and contributed little of significance to vocational education (Unwin, 1996; Deissinger, 1994). The key and prestigious educational intuitions, such as Oxford and Cambridge Universities, were still primarily concerned with preparing graduates for roles in the clergy for the Anglican Church (Aldrich, 1994). Indeed, in 1814, the kind of legislation introduced into Germany was rescinded in Britain with the overturning of the statute of apprenticeships, legislated in 1563, which had required a 7-year apprenticeship for many occupations. Hence, the approach adopted here was of laissez faire liberalism. Indeed, Ainley (1990) notes that the Statutes of Artificers (or Apprentices) was the only legislation to deal exclusively with training for work until the Industrial Training Act became law in 1964. There had been changes to other legislation, but primarily for purposes of addressing community concerns, rather than as a structured approach to skill development. The concern was about these individuals becoming financially independent so as not to become a burden of the parish, which would otherwise have to support them. In 1601, the Poor Law was amended to permit pauper children to be apprenticed (Bennett, 1938). However, it was claimed that these measures were subsequently used in the industrial revolution to virtually enslave children of poor families. In comparison to mainland European countries, the commitment to a systematic provision of vocational education in Britain was always weak, and only arose as a concern in times of emergencies, such as the Second World War. Indeed, it has been suggested that unlike the first wave of industrial revolutions, Britain's lack of success in the second wave was in part due to the lack of an adequately skilled workforce (Aldrich, 1994). Mathias (1983, cited in Aldrich) claims that the second industrial revolution resulted from the use of applied science which required a form of technical education and training. This was largely absent in Britain and it suffered as a consequence.

In other European countries and the United States, some forms of education and training had been promoted in a more coherent and centralised way which had provided a supply of well-trained skilled workers. For instance, vocational education enjoyed a higher social status in Germany than in Britain. That status is informed by what is referred to in Germany as the *Berufskonzept*: a societally valued conception of skills and skilfulness was supported by the German community and enterprises (Deissinger & Hellwig, 2005). Yet, this sentiment was largely absent in Britain at this time, and perhaps since. The importance of a national sentiment which is supportive of occupational skill development emphasises the role of the societal discourse in the kind of education provisions that are enacted. It seems that not only did many of the British institutions (e.g. monarchy, aristocracy and church) survive the social revolutions that occurred elsewhere, but that these institutions remained important and influential. Yet, their practices and emphases did little to support the emerging requirements of an industrialised nation. Oxford and Cambridge remained the prestigious universities, as did the disaffection with anything other than a liberal

education, despite the fact that many of its graduates, for example the clergy, had particular vocational intents. There was an abiding belief that the workshop was the place to learn trade skills (Green, 1994). Both Green (1994) and Aldrich (1994) note how powerful elites shaped the views about vocational education in Britain during this time. The overall dominant values of Victorian times – individualism, enterprise, laissez-faire liberalism, along with conservative Christian values – shaped state policies and practices. Indeed, it seems that much of Britain's success of the first industrial revolution was founded upon the inventions of the few geniuses who had created a modern manufacturing system largely based around the use of relatively unskilled labour. This was reinforced by the ongoing political sentiment of laissez-faire. In contrast to what was occurring in mainland Europe, laissez-faire politics strongly resisted state-imposed education for all. It was not until the last quarter of the nineteenth century that it was realised that such policies and practices had not positioned Britain well in the extent and depth of its skilled workforce (Green, 1994). By this time, the inadequacy of skills in workplaces meant that not only were skilled workers absent but also that those who could supervise and support skill development were also scarce. Hence, there was a structural problem with not only skills but also with the capacity to develop skills in Britain. Consequently, the passing of the 1889 Technical Instruction Act committed local councils to set up technical instruction committees which could be financed from the local rates (i.e. levies applied in the community). However, the take-up and enactment of this initiative was reported as being quite uneven. Nevertheless, Green (1994) concludes that this was the golden age of the English technical education movement. It was made possible in part by the waning of liberal hostility to state intervention which characterised the last two decades of that century and led to the development of a locally based vocational education provision. Yet, the long period of neglect had an enduring legacy in establishing technical education as the poor cousin of the British education system. Hence, the standing of this educational sector and its resources were shaped along these lines.

One of the key changes required for British education and training was a reformulation of the provision of occupational preparation. This reformulation occurred to a greater and lesser degree across its counties. Indeed, it seems that, as elsewhere, the move to industrialisation and factory work led to a separation in the relationship between apprentices and their masters, which required the state to act to ensure the adequate provision of skilled workers. As in other European countries, rather than living with their masters, the apprentices' engagement with them was fundamentally changed as they worked together in a factory. Moreover, Bennett (1938) suggests that an increased emphasis on production and intensity of factory work disrupted the kinds of activities and interactions between the master and apprentice that had for 1000 years or more led to the development of skilled crafts workers. The opportunities to observe, participate and engage in joint problem solving and the measured and organised progression through activities of increasing demands and accountability were central to the organisation of the apprentices' learning experiences. Moreover, whereas apprentices had previously been subject to the management and control of the master, now, they could represent a direct threat to the

ongoing employability of more skilled workers. All these factors likely eroded the richness of the knowledge-generating activities and interactions which had formerly been central to the development of skills in European workplaces. This dislocation was probably played out first in Britain and because of the relative success of the shift to this new way of working, there appeared to be a less than adequate educational response to the erosion of the processes of skill development in this country. Indeed, the key reformers were concerned about the quality and standard of the conditions under which young people were employed in these factories, as well they might. Yet, the British vocational education system was far slower to develop and did so in a far more piecemeal fashion than those of the Germanic countries, for instance.

However, there was one very important innovation that arose through the British experience during this period that deserves acknowledgement. That is, the provision of continuing vocational education arose out of the realisation that the adequacy of the skills of some British workers was insufficient for them to develop their capacities further and deal with the emerging technologies of the time. George Birkbeck who was professor at Glasgow University realised that many of the crafts workers he employed to make instruments lacked foundational knowledge about the scientific principles of their occupational practices. Consequently, he organised and gave lectures to workers about the scientific principles upon which the machinery with which they worked operated. In particular, he was concerned that these workers developed a principal understanding of their occupational field (Bennett, 1938). This initiative led to the development of Mechanics Institutes which were used to educate workers about these principles. In many ways, this educational provision was a forerunner of what has come to be known as continuing education and training, or professional development. There was an explicit acknowledgement in this provision that the knowledge these workers had acquired through their initial training was quite insufficient as the requirements for their work changed. Yet, as elsewhere and with other initiatives, the educational provision alone could not sustain such development. The Mechanics Institutes initially thrived and reached a high level of membership (i.e. 25,000), yet their numbers then dwindled (Bennett, 1938). It seems that many of the members had such poor basic education that they were unable to maximise the opportunity provided by the lectures, and also translate any learning into material gains. However, the issue of continuing education for all workers also arose in Britain, as it did in Australia during wartime. In Australia, the first national vocational educational initiative that was engaged with by all states was during the Second World War. Its purpose was to develop the skills required to stage the war effort and then to prepare returning soldiers for civilian occupations (Dymock & Billett, 2010). The British Institute of Adult Education's white paper on educational reconstruction urged that continuing education become an essential educational sector. It stated that

> . . . without provision for adult education the national system must be incomplete, and . . . the measure of the effectiveness of earlier education is the extent to which in some form or other it is continued voluntarily in later life. (British Institute of Adult Education, 1945, p. 1)

However, in contrast to leadership here, the educational provisions for lower-level occupations, concerns about more responsive educational provisions were required to address the burgeoning requirement for new occupations and professions commenced later than in many European counterparts. Nevertheless, when they came, they were quite substantial. For instance, it is claimed that in the mid-nineteenth century the University of London was established, in part, to address such needs that were not being responded to by the ancient universities (Roodhouse, 2007). Similarly, elsewhere in Europe, colleges of mines, engineering and commerce were also being established. Later, in Britain, technical schools and colleges were developed as specialised professional schools for teachers, nurses, artists and designers. They eventually became the basis for the English Polytechnic system. Following the period of the industrial revolutions in their countries, the British grammar schools, German gymnasium and French lycees were strengthened as educational institutions for direct progression to the professions (Bantock, 1980), which were growing in number because of many new occupations generated by the Industrial Revolution.

In France, as in many other European countries, the end of a feudal period had seen a sweeping away of the institutions of the ancient regime, including the corporation (i.e. guilds). All of this was done with significant enthusiasm as part of the French Revolution to expunge the *Ancient Regime*. However, the form of vocational education provision that emerged through this period was quite distinct from that within Germany. Perhaps in keeping with the farming-dominated economy, it focused on agricultural preparation as a mode of general education for young males, in particular. In 1788, the Duke of the Rochefoucauld-Liancourt established a school on his farm at La Montague in which the sons of non-commissioned officers of his regiment received general education and learnt occupational skills (Bennett, 1938). The French government agreed with this model and proposed to extend it to the sons of soldiers of the *Grande Armie*. Subsequently, Bonaparte was impressed with this school and extended its reach to train farmers. As a form of institution-based training, it comprised separate workshops on the trades of (i) blacksmith, fitter, machinist and metal turner; (ii) foundry man; (iii) carpenter, joinery and cabinet maker; (iv) wood turner; and (v) wheelwright. In 1826, two-thirds of each day was dedicated to manual work and the remainder to theoretical instruction. There was a very practical and applied emphasis to this approach to vocational education, yet the approach ultimately was quite unsuccessful for developing the kinds of work required for factories. Ultimately, it was decided that these schools were not able to provide the full range of authentic experiences required in apprenticeship training, which led to a crisis in the generation of skilled labour – the 'crisis of apprenticeship' – that lasted through until the beginning of the First World War (Troger, 2002). Consequently, as elsewhere, it was concluded that the great mass of apprentices would have to be trained in factories. Yet, as in other countries, the need to develop highly skilled workers was not the only consideration in France. Impetuses associated with the exploitation of children as well as concerns about skilled labour led to the development of technical schools and evening classes. Yet, throughout, there were also concerns about

young people being unemployed and idle, and potentially resorting to crime or revolutionary ideas (Troger, 2002). The transformations in France extended to the temporary closure and then reform of the Sorbonne (Roodhouse, 2007). In its place were established the Haute Écoles with a greater focus on technology and applied knowledge.

The Dutch system represents another variation on post-feudal pathways. Whilst the guilds there experienced a decline, it was only when France invaded Holland that they were actually abolished. This led to more expansive role for the Dutch government. However, unlike in Germany, the guilds were not reconstituted. It was only when a significant increase in demand for skilled labour occurred in the second half of the nineteenth century that the vocational education system was expanded. The *Ambachtscholen* comprised an institutional alternative to apprenticeship in the form of a trade school, and the content comprised a combination of occupational-specific and more broadly applicable content (e.g. writing, arithmetic, language and style exercise, general and Dutch history and geography). This model became the standard for the Dutch vocational education system which lasted into the twentieth century (Frommberger & Reinisch, 2002). In this way, there are similar patterns here as those in Germany and America for establishing an initial vocational education system, that is, maintaining societal order whilst meeting the needs of industry and state for skilled workers.

There were also advances in the approach to vocational education occurring at this time which influenced how these educational provisions were enacted. For instance, the sequential method of apprenticeship was developed in Russia by Victor Della Voss, the director of the Imperial Technical Railway School in Moscow. He was concerned that the existing processes for training mechanics apprenticeship were uneven and slow (Bennett, 1938). This sequential method of trade training was premised upon mechanical principles, military order and uniformity, in producing higher grade and better trained workers in a shorter period of time and at a lower cost. This was to be achieved in the following ways. Firstly, establishing a set of workshops called instruction shops. Secondly, equipping these workshops with enough equipment and as many sets of tools for every student in the class. Thirdly, he analysed the skills and knowledge to be acquired and organised elements of instruction into tool and construction exercises. A working drawing of each exercise was provided for every student in a given class. Fourthly, during each workshop, the teacher gave a demonstration lesson of the first exercise in a series of exercises, and then required all members of the class to perform the same exercise. Fifthly, each member of the class engaged in workshop activities with the tools performing the exercise. Subsequently, the teacher demonstrated a new exercise and the students reproduced that exercise. Sixthly, in a subsequent period of activities, a new set of tasks were modelled and taught but with less close inspection. The students had learnt the correct habits in the use of tools and, therefore, could be self-monitoring and could exercise high levels of competence with their tools. Part of the educational goal here was also to develop students' initiative for taking responsibility for their learning.

The sequential model featured in the World Exhibition in Vienna in 1873, and attracted much attention and was utilised widely in Europe (Hanf, 2002). It also attracted attention in the United States after its showing at the Philadelphia Centennial Exposition in 1876, where it is credited as establishing a new vision for vocational education in America (Barkey & Kralovec, 2005). This method was seen as a more advanced and systematic approach to occupational preparation than that which had been utilised widely across human history until this point of time: the journeyman or apprentice within the family business. Consequently, the scientific emphases which arose through this period of modernism had direct consequences in terms of the advancement of pedagogic approaches for vocational education. In addition, the ideas and reforms proposed by Kerschensteiner both provided and were buoyed by the social and political impetus that existed in Germany at that time (Gonon, 2009b).

In this way, modernity and, in particular, the development of modern states and their intervention into social affairs, including education, led many European countries to establish what constitutes their vocational education sectors. Because these interventions occurred at different points in time for these countries, addressed specific problems and were shaped by social institutions and debates around all of these, these nascent vocational education sectors had quite different forms and institutions. In these ways, societal impetuses and historical events of different kinds were responded to by the transformation of educational provisions and sectors in these European examples. Yet, there were also common impetuses across many of these state interventions. In particular, beyond the need to ensure a supply of skilled workers, there were imperatives associated with skilling up young people so that they would be employable, and in doing so avoid the threats that were perceived to accompany idleness, including engaging in antisocial and anti-establishment activities such as overturning the state through social revolution. Doubtless, similar sets of factors shaped the bases for and form of vocational education systems in countries outside Europe. For example, societal change and debates about how to proceed feature in countries such as Singapore as they had done in the United States. Singapore similarly rejected the apprenticeship model in the 1960s and established a vocational education sector premised on participation in educational institutions (i.e. polytechnics and institutes of technical education). Elsewhere, the growth of professional and technical occupations led to the development of a broad field of vocational education institutions and provisions (Roodhouse, 2007).

It can be seen from the above examples that whilst the formation of national vocational education sectors proceeded to address fairly consistent sets of social goals, this was done in isolation from and separate to what was occurring in universities. Despite the need to address a demand for technical skills and the growth in professional occupations arising from the industrial revolutions and modern societies, the two forms of education remained very distinct and very separate. However, a key contemporary premise for the two being considered together as a field of vocational education is that there is little distinction between provisions of vocational and higher education, as elaborated in Chapter 2.

Academic Perspectives and Sentiments

As proposed throughout this text, powerful social elites have developed and enacted discourses about different kinds of occupations, their worth and how educational provisions might be aligned with them, and even those who undertake those forms of work, which have had enduring legacies. With the division of education into that of a more general kind and that of a more specific kind has come the provisioning of these two different kinds as a hierarchy within the academic discourse about education. Almost directly following from the precepts established by Aristotle and Plato, there is a powerful and enduring thread of academic thought which emphasises that a more general preparation (i.e. as in schooling or a liberal higher education) is essentially far more worthwhile and worthy than a more specifically focused provision, such as offered through vocational education. Some of this sentiment focuses on the particular values associated with educational activities, and others about beliefs associated with the kind of knowledge that should be learnt. These particular values are still commonly exercised. For instance, Dror (1993), in reflecting on professionalism in the field of policy, states that

> In principle, I regard working for profit-oriented enterprises as morally inferior to serving the public good in governmental and public interest organisations. When I speak of policy professionalism as a vocational calling this applies therefore to the public domain, though the same knowledge and skills can be of much use in the private sector. (p. 12)

Adler (1988 cited in Elias, 1995) similarly claims that vocational education is education for the sake of earning and not learning, and 'School is a place to learn and not the sake of earning'. This kind of learning, he argued, should occur on the job. Yet, Adler's critique denies most of what occurs in contemporary schooling and tertiary education either explicitly or implicitly. Here too is the sound of a society privileged voice, and a contradictory one. Why is it acceptable for some forms of earning (i.e. being an academic) to be worthy of learning in educational programmes, yet not others? Like so much of what has been discussed above, it is not always easy to identify the basis of the rationale for making such distinctions. Certainly, the evidence suggests that there is no particular advantage in the transferability of knowledge that is without application and no specific domain within which it can be understood and embedded. Instead, much of the discussion appears to be associated with particular values. That is, the beliefs that certain forms of knowledge are more inherently worthwhile than others provide a more powerful capacity to think and act, and are held to be superior to others. Such ideas may well have held some credence to the idea that abstract and highly conceptual knowledge can be applied across any range of settings. Hence, the discipline required to learn Latin, the problem solving developed and demonstrated through chess, the activities on the playing field were all seen to be key qualities that could readily be applied elsewhere. Yet, more recent accounts of learning suggest that this applicability is most likely found when there are similarities between these kinds of generalisable learning and their application elsewhere, rather than as inherently adaptable forms of knowledge. The degree to which Latin informs an understanding of the languages individuals are learning

(including their own); or the capacity to think carefully and consider alternatives learnt through chess may well have applications where that kind of performance is required; or when individuals work together and play closely in teams with clearly defined goals and clearly statable rules may well be applications to related activities. However, two key qualities of experts, those who are seen to be highly competent in their field of activity, are the possession of domain-specific knowledge and in its conceptual, procedural and dispositional forms at a range of levels and interactions. So, just as the way that studying engineering provides a broad set of understandings and capacities which then need to be applied and developed further within a particular application of engineering, so are those kinds of capacities that are developed through a liberal arts education. This is not to denigrate such an education. However, it is to contest simple assumptions that a liberal arts education is in some ways more educationally worthwhile and inherently more adaptable than other forms. All too often, there is silence around the fact that the most prestigious courses in many universities are those preparing individuals for the highly specific professions such as medicine, law or commerce. These courses, by any considered definition, are archetypal instances of vocational education in the very specific form of that term; that is, they prepare individuals for specific occupations. They were also some of the first forms of education which included structured practice-based experiences as part of the curriculum.

Moreover, it is difficult to identify university programmes that are often described as being in the liberal arts that do not have direct occupational applications. It seems that many universities were established in places like Britain as training institutions for the occupations such as clergy, public service, diplomats or teachers, who require the kinds of capacities developed through a liberal university education. Therefore, the kind of distinctions that are often made to distinguish between general forms of education and vocational education appears to be far more limited in practice than in rhetoric. Moreover, at the conceptual level, and as has been discussed in the previous chapter, and will be elaborated in Chapter 6 on the educational purposes of vocational education, if vocations are viewed in terms of their importance to individuals, these forms of education are also distinctly occupationally focused. Being a philosopher, a historian or a literature specialist are all potential vocations for those who engage with these sets of ideas and practices and come to associate with their sentiments and appropriate their worth and values. Yet, these occupations as vocations require a mix of domain-specific knowledge associated with a particular discipline, as well as the claims of non-discipline-specific knowledge required to engage in and extend these practices. However, the same can be said for all forms of occupations. Therefore, from both accounts of occupations which are discussed here, many, if not all, provisions of higher education are inherently vocational.

Finally, it is important to consider the role of bureaucracy in modernism and how this has come to shape the provision of vocational education. As noted above, the advent of states and their abiding interest in education for economic, social and civic purposes has been mirrored by a level of state intervention into education which is historically unprecedented. In particular, it seems that in times of social or economic distress the level of intervention increases and becomes more encompassing. Sitting

behind this intervention is a desire for control and management of the educational system to achieve the kind of goals set out for it by government. This intervention is particularly focused on vocational education since it addresses directly key government priorities associated with the development of skills in an increasingly competitive economic world, the development of young people to help them gain entry into the labour market and avoid unemployment and to meet the rise and fall in the demand for different kinds of labour. Hence, it is important to consider the role and power of bureaucracies as they relate to vocational education.

The Role and Power of Bureaucracies

The end of feudalism in Europe and elsewhere and the rise of modern societies, albeit social democratic or in other forms, has led to the development of bureaucracies that enact the business of governments and exercise the power of the bureaucrats. Of course, in many countries, in China for instance, these arrangements are long standing. Yet, in many ways, the kinds of regulations and conventions that were enacted by aristocrats or theocrats in earlier times are now being enacted by those who work for government departments and agencies representing particular sets of interests who are invited by government to inform policy and practice. As discussed elsewhere, the rise of vocational education more widely in Europe arose for similar reasons to that of compulsory education, the need for an orderly and educated society (Gonon, 2009b). It seems that it was in southern Germany where the realisation that a response to an emerging and potentially radicalised working class was to engage them within vocational education provisions. So, just as occurred in France, Austria, Britain and other European countries, vocational education provisions and systems emerged only partly to manage the supply of skilled labour which had previously been mandated by guilds. As well, there was an imperative associated with engaging young people in an educational system that would provide a basis for desirable forms of integration and participation within their nation's social and economic activities, that is, a civil society. Indeed, a similar set of concerns at the end of the First World War is what caused the United States to consider what form of vocational education it should adopt. The debates that Dewey engaged in were set within a context of not only securing an adequate supply of skilled labour but also creating the means by which large numbers of unemployed young males might well be fitted into American society at the conclusion of that conflict.

Since these times, with an increased concern for managing both youth employment (or unemployment) and the development of skills required for national economic goals, the organisation and management of employment and skills, and the education provisions that support them have become of great interest to governments. Consequently, bureaucratic and regulatory practices and their imperative to standardise and impose accountability regimes comprise 'the somewhat inevitable accompaniment to increased state involvement in VET in recent times' (Lum, 2003, p. 2). In some ways, those working directly or indirectly for and through governments have become the 'powerful others' of today, though their voices are different

from the voices of the powerful others of earlier times. They include those from government who are engaged in addressing societal and economic goals associated with employment and work; those from particular sectoral interests such as employers' associations and trade unions and professional associations who seek to represent the interests of their members. These institutions and those who represent them have become increasingly powerful, and conceptions of occupations and vocational education are shaped by the discourses that they propose and enact. So pervasive are these intrusions that they seek to control and manage the vocational educational provision in ways that are wholly inconsistent with what they claim to be the goals of their intentions (Billett, 2004). For instance, many countries have established regulatory arrangements through which to manage the provision of vocational education. At one level, and as detailed in the next chapter on purposes, the educational intents (i.e. aims, goals and objectives) that are used to shape what is taught and assessed in vocational education provisions are increasingly being informed by industry standards and requirements. However, it is worth mentioning that the efforts of government and their bureaucracies to engage with occupations and developing appropriate provisions of vocational education are not uniform. Whereas considerable effort is directed towards developing standards and national curriculum for the trades, technical and service work, there is no such demand to delineate, categorise and generate statements of competence for politicians, company directors, doctors or, as Halliday (2004) reminds us, bishops.

Within the kinds of arrangements outlined above, the selection of content and the means of its teaching and assessment are being stipulated by external agencies representing particular interests. These arrangements are often actively supported by governments who seek to involve such 'stakeholders' in formulating these educational intents and then administering their implementation. This bureaucratic process also extends to the provision of requirements for the accreditation of institutions that wish to offer particular courses. In these ways, these bureaucratic processes seek to control what is taught, who teaches it, how it is taught and how it assessed and by what institutions. These issues have become highly important to governments' concerns with national social and economic well-being. Yet, the degree to which such bureaucratic control is directed towards realising worthwhile educational purposes and processes is not always clear or without question. To take one example, the widespread interest in competency-based training by tripartite bodies comprising government, employers and unions has been used to advocate this form of vocational education, despite its roots in behaviourism. The critiques of those who question the worth of such an approach to organising and enacting vocational education, particularly from academics, are easily deflected in the public discourse by simple assertions about the importance of competency, not how that competency is defined and characterised. For instance, often the key strategic goals for workforces are to be adept, flexible and able to respond to new challenges. Yet, it would be difficult to identify informed views which suggest that these kinds of goals will be secured through the use of behavioural measures. Hence, given their popularity within government-inspired and enacted frameworks for education, the case claiming that these frameworks are merely means by which governments

can attempt to control an important part of public activity (e.g. the education of people for direct economic purposes, including their employability) becomes more credible.

It is these bodies that have been given the role of identifying hierarchies of occupations, the kind of skill standards that constitute these occupations and the kinds, duration and level of educational provisions that are required to develop the prescribed level of skills. They also have roles in regulating and certifying the provision of vocational education premised upon such frameworks. Moreover, as proposed above, likely views about the capacities of, and potential for, further development of the capacities of those who are engaged in work continue to have serious implications for occupations and vocational education. For instance, beliefs about whether individuals engaged in low-status work have higher-order thinking capacities shaped views about whether it was worth providing them with vocational education, what form it would take and what focus it should have. Further, such sentiments would also determine from whom the advice about these matters would be sought. 'Others' would make decisions not only about the form and purpose of vocational education for these workers, but also about how these matters would be developed and enacted. Indeed, a tradition has arisen in vocational education whereby for many occupations, spokespersons make decisions about the purpose and content of courses. The DACUM curriculum development process that has been widely adopted in vocational education is one example of this process (Willett & Hermann, 1989). It was often supervisors, rather than those who undertook the work, who were proposed as being most able to provide information in the curriculum development process. Certainly, these supervisors were expected to clarify matters of which they were uncertain with those who practised. Nevertheless, they were the key informants, not those who practise the occupation. All of which means that those who are given supervisory responsibilities continue to play an extremely powerful role, never more so than when there is either a crises in the available levels of skills or in national employment levels, particularly for young people. In the majority of these arrangements, the voices speaking on behalf of the actual occupation are absent. The exceptions tend to be professional associations, which are largely not considered within mainstream vocational education, except on matters of articulation. Even when the voice of workers is represented by their unions, in many countries much of their deliberations are principally associated with industrial conditions (e.g. hours of work, levels of pay) rather than concerns about the occupation. The exceptions are those who speak for the profession such as medical associations and nursing unions. When such groups consult, as they often do, the kind of projects that are engaged in, the purpose they are working towards are, however, set within bureaucratic models of control and regulation: the parameters for the discussions are well set. Hence, the developing national statements of occupational competence can be used to constrain such deliberations to those that fit well within a bureaucratic model. These are supposed to be quantifiable and measurable, so that workers can be controlled and compared. Alternative approaches might acknowledge what constitutes occupational practice, and that it is likely to be quite distinct across work setting in which the occupations are practised. This is because the needs of those for whom products

are produced, serviced and redesigned, and the provision of services to individuals and communities, are far from uniform and the need to account for a range of situational factors, not the least being that the requirements for occupational performance are likely to be quite situational.

Consequently, after all this time, there are still key agencies that make judgements about occupations, and educational provisions that support the development of those occupations that are undertaken in circumstances and by voices that are often quite remote from the practice of the occupation, practitioners of different kinds and the diverse range of circumstances in which these occupations are practised. Hence, at this time narrow and comparable quantitative measures are the kind which are preferred, rather than having far richer conceptions of (i) the knowledge which is required for effective occupational performance; (ii) how that knowledge might be best learnt by practitioners; (iii) in what ways particular forms of knowledge might best be promoted in educational processes; and (iv) how assessment of vocational knowledge might be made more valid. Indeed, some of the frameworks that are used to develop curriculum, determine what will be assessed and how it will be assessed within vocational education provisions appear to have progressed very little from Aristotle's consideration of *techne*.

The Development and Ordering of Vocational Education

It can be seen through the discussion above that through the era of modernity encompassing processes of industrialisation and the formation of democratic nation states, distinct vocational education sectors have been formed in many countries. Working from societal sentiments and norms, this provision of education was largely seen to be for young people to prepare them for working life as productive participating citizens of their state. Given the particular circumstances in each country, the development of these education sectors was far from uniform despite their having similar goals and purposes. Generally speaking, the efforts were to generate a mass education system rather than elite institutions. Yet, through this period, a view developed about the worth of workers and the centrality of individuals to their work and the quality of that work. Also, through this period, significant changes occurred in the provision of a higher form of education that was required to meet the need of a growing number of professional and technical occupations that were emerging. Yet, it appears that in not all countries were efforts made to align the goals and purposes of the processes of the vocational education sector with those kinds of developments. At the same time, the role of the bureaucracy in ordering and managing the provision of state-based vocational education systems became more prominent. As the role of bureaucracies has increased, their invited participants' voices have come to shape the form of vocational education. However, throughout all of this, the voices that remain unheard are those of the people who practise occupations and those who teach others how to engage in them. The notion of the socially privileged voice is playing out here. The business of vocational education is seen as

being far too important to be left to those who know how to practise and those who teach others about this practice. Instead, likely advice on the various initiatives will be left to those who are invited as informants by government. The degree to which these informants are knowledgeable and able to contribute to the discussion remains unclear. However, to date, examples from some countries suggest that there is significant concern about the degree to which these parties can authoritatively offer advice about the provision of vocational education.

One role that has been exercised through these interests is in the development of the purposes for vocational education, and the curriculum. The following chapters take up this set of concerns through first a consideration of what constitutes the educational purposes of vocational education (Chapter 6) and the implications for curriculum (Chapter 7). In particular, the way that the intended curriculum has been shaped by these kinds of interests, though often in a demanding, pre-specified and regulated way, is discussed and elaborated in Chapter 8 – The Provision of Vocational Education.

Chapter 6
Purposes of Vocational Education

Education is the terrain where power and politics are given a fundamental expression, since it is where meaning, desire, language and values are engaged and respond to the deeper beliefs about the very nature of what it means to be human, to dream, and to name and struggle for a particular future and way of life.
(Giroux, 1985, p. xiii)

Vocational Education Purposes

The previous chapters discuss the concepts of vocations and occupations as key premises to consider the purposes, forms, organisation and enactment of vocational education. The development of the sector of education referred to as vocational education has also just been discussed. It has been proposed that there are social and personal dimensions to both vocations and occupations. Personal imperatives are stronger in the former and social imperatives in the latter, and these emphases have implications for both the purposes and processes of vocational education. It has also been advanced that in many countries the formation of dedicated vocational education systems was associated with realising societal (i.e. national) imperatives. Typically, these imperatives were threefold: (i) the need for skilled workers, (ii) a more educated youth and (iii) the engagement of young people with civil society. Consequently, the purposes of vocational education need to take account of and reflect the scope of the personal and social factors that constitute these conceptions and imperatives. It has also been advanced that vocational practitioners have often been denied a voice in the presentation of what constitutes the work they do, its worth and complexity, and the kinds and provisions of preparation that might best serve its continuity. Instead, it has been the voices of societally privileged others who have advanced claims about the worth and standing of different kinds of occupations that are addressed within vocational education provisions. These voices influence societal views about occupations and the focus on and kinds of effort directed for their development. Yet, there is a requirement for an elaboration of vocational education securing continuity and advancement with the cultural practices that constitute occupations, the places where they are utilised and how societal

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needs can be advanced, as well as those individuals who practise. Accordingly, this chapter builds upon the previous discussions to delineate and elaborate the purposes of vocational education. In doing so, it advances an understanding of how this sector of education should be organised and enacted to meet these purposes and on what bases vocational education provisions should be appraised.

Educational Purposes

As with all fields and sectors of education, there is a range of focuses for, perspectives about and orientations to what constitutes the purposes of vocational education. These purposes are important as they guide the planning for, provisions of and means by which this field of education is deemed worthwhile. As proposed in Chapter 2, all education can be seen as being vocational, insofar as it seeks to realise individuals' aspirations and support the personal interests and trajectories that comprise their vocations. Hence, the purposes of vocational education per se would include concerns associated with individuals being able to realise their full potential through their paid work, pursuing their occupational interests and securing their work life goals and their life goals beyond their paid work. In this way, vocational education also has purposes associated with assisting individuals overcome disadvantage through the circumstances of their birth and social positioning, as well as their earlier educational experiences. Yet, beyond these important personal imperatives, vocational education is also concerned with reproducing, remaking and transforming occupational practices that have historical, cultural and societal geneses (Thompson, 1973). It also has important and multifaceted social purposes that include overcoming disadvantage arising from circumstances of birth and less than successful experiences in earlier education. Through accepting the premise that vocations have important personal and societal dimensions, the purposes of vocational education identified, elaborated and discussed here necessarily focus on developing and sustaining capacities to enact culturally derived occupational practices and transform those practices in response to human needs, development and advancement.

It follows then that the purposes of vocational education, following Dewey (1916), include advising about, preparing for and sustaining individuals' vocational practice, and extend to their life beyond work. These purposes comprise the development of the procedures, understanding and dispositions (i.e. the capacities) required to practise the particular occupations individuals select as their vocation, and more general capacities to engage in a rich working life and also life beyond work. They also include supporting individuals as they cope with changes to occupational practices across their working lives. These kinds of changes continually arise as work requirements, technology and work organisation transform over time, with the particular manifestation of these practices evolving in particular ways across work settings throughout working lives. Moreover, the provision of vocational education extends to developing the range of capacities required to effectively engage in working life, including those associated with effective communication, negotiations with

others, possession of requisite levels of literacy and numeracy and coping with work transitions. These are sometimes held as being generic capacities required for all forms of work, and are seen as employability competencies. In addition, there are purposes associated with developing the range of capacities required to think and act strategically. Collectively, these capacities are analogous to developing the six ways of knowing to which Aristotle referred (Moodie, 2008), albeit in their more contemporary guises. For example, workers should be able to respond effectively to non-routine or novel work activities, not just *techne* or 'know how' for which vocational education is often characterised.

Beyond the focus on developing the personal capacities and even specific skills required for occupations, there are also other purposes towards which vocational education can be directed. For instance, education can be considered as variously reproducing or transforming society in different ways, and for a range of purposes. This range of purposes is articulated in the kinds of educational intents (i.e. goals, aims and objectives) that are selected for vocational education, often by those outside it that, in different ways, reflect 'stakeholder' desires for vocational education; it also has a wider range of purposes. There are also quite distinct values and orientations implicit in these diverse kinds of purposes. These include (i) assisting individuals engage effectively in working life, (ii) securing personal or societal emancipatory changes, (iii) supporting the sustainability of particular enterprises and (iv) supporting national economic performance. Such orientations often position vocational education as being about (i) reproduction (i.e. continuity of vocational practices, the skills the community needs), (ii) adaptation (i.e. adapting particular vocational knowledge to the purposes of particular interests or moments in time, what enterprises need), (iii) social criticality (i.e. emphasising the inequalities and contradictions within society and using education to bring about change, such as assisting young people negotiate those effectively) or (iv) emancipation (i.e. bringing about personal change through vocational education, such as assisting migrant refugees to develop the capacities to gainfully and productively engage in the society that has invited them).

In addressing these issues, the chapter is structured as follows. Firstly, the range of factors, perspectives and orientations that are to be considered for delineating the purposes of vocational education are briefly elaborated. This discussion goes beyond educational intents, the perspectives of different interests and the diverse orientations that the purposes of vocational education might serve. A set of diverse purposes for vocational education is subsequently delineated: (i) cultural reproduction, remaking and transformation, (ii) economic efficiency, (iii) societal continuity, (iv) individuals' suitability for the occupation and work readiness, (v) individual progression and (vi) personal and social strategic goals. Each of these purposes is elaborated in terms of what it comprises and its implications, including how it plays out across the individual and social divide. In all, this chapter proposes that there has to be a reciprocity and balance between personal and societal imperatives that constitute the range of purposes that are identified for and selected to be enacted within vocational education provisions.

The Purposes for Vocational Education

As foreshadowed in the introductory chapter, Dewey (1916) proposed two key purposes for education for vocations: first, to identify the occupations individuals are suited to and, second, to assist them in developing the capacities to be effective in their occupation. However, there are other, more differentiated and more or less specifically focused purposes that reflect particular perspectives and needs. For instance, in the United States, Elias (1995) notes that terms that are quite different have been used to describe education related to the preparation for employment and retraining. These terms include 'manual training', vocational education (i.e. Dewey's preferred term), and, more recently, career education and technical education. He also notes that some of these descriptions avoid the word 'education' and, instead, use the word 'training' which implies a narrower educational purpose. Thompson (1973) claims the occupational purposes of education can be found across all its sectors. For instance, in primary education, students may learn about the world of work as a set of cultural practices and the implications for those who practise them; in general education, students may consider issues associated with the development of skills on the problematic nature of working life; and in adult education, students may develop the capacity to help themselves and to assess and further develop their capacities. This listing suggests that purposes associated with the project of vocational education are of diverse kinds and stand to guide educational provisions in distinct ways across a range of sectors, to which higher education can be easily added. In apparent support of such a claim, Wall (1967/1968) suggests the case for a more occupationally biased education can be made on two premises. Firstly, there is an economic argument that is politically attractive. The capacity of economic expansion is grounded in having enough appropriately skilled workers. Consequently, people need to engage in ongoing education to develop the skills that society requires to continue its economic development. Secondly, such a form of education provides outcomes that many students want (i.e. preparation for an occupation as paid employment). Both these purposes are evident in the shaping of much of contemporary vocational education. However, Skilbeck et al. (1994) also propose that beyond these economic imperatives, public education is crucial to the formation of culture and the maintenance of social order and that it contributes significantly to equity, social justice and material advancement, and that all this needs to be realised through vocational education. Indeed, as has been argued in the previous chapter, skill supply, further education and the maintenance of social order shaped both the introduction and form of vocational education in European countries and the United States. So, there are economic, societal and personal factors shaping such views, albeit having quite distinct emphases. Addressing skill development requires one kind of experience, but efforts to engage and secure the maintenance of order in civil society may require experiences that are quite different.

Taking up these specific non-occupational concerns, like Thompson (1973), Elias (1995) proposes that vocational education should have both general and specific purposes. These are captured in the suggestions that vocational aspects of education should (i) be viewed as part of general education of all students and that a general

education would not be complete without it, (ii) include exposure to the broader cultural meaning of work for reflecting on one's own work and that of others, (iii) include a technical education which entails a knowledge of the theoretical principles that enable individuals to apply their knowledge to new and changing situations and (iv) include technical training in a particular occupation skill or technique (p. 189). Hence, there are purposes associated with the role of work in the society in which individuals live and work. Included in the latter are fundamental concepts associated with democracy, such as the nature of distributive justice (i.e. individuals receiving their fair share of the goods allocated in society) (Halliday, 2004). These concerns are consonant with propositions advanced by Carr and Hartnett (1996) that a democratic society needs to be an educative society to support equal opportunities for self-development, self-fulfilment and self-determination. Similarly, Quicke (1999) suggests that

> . . . the learner in the democratic learning society is constituted as a person – somebody who actually or potentially has the capacity to make moral choices, act autonomously and think rationally – and learning is about the development of persons as unique individuals from being active participants in democratic learning communities. Such participation empowers them to act upon the world around them and transform it, and to act upon themselves in the same way. The more autonomous a person becomes, the more they are able to make use of what they know to create and achieve self originated goals and the more they will play a part in the development of their own capacities in the development of the learning communities to which they are committed. (1999, p. 3)

However, such suggestions about educational purposes will not always be enthusiastically embraced. For instance, industry and enterprises and government may view these kinds of purposes as unnecessary distractions away from economic imperatives associated with full employment and competitive workplaces, and employers would be likely to report that they would prefer more occupationally relevant content to be taught. Also, students often do not always appreciate or see worth in these kinds of experiences, as they are focused on their own immediate concerns with securing employment or meeting other kinds of personal needs (Molloy & Keating, 2011). However, those concerned with transformative or liberation education might hold different views. For instance, an early concern in the manual training movement in America was whether vocational education would serve to maintain distinctions within society. This was noted by William Dubois, a northern black educator and activist (Elias, 1995). Dubois (1902), when considering the education provided at these nascent vocational education institutions and reflecting on the anachronisms of industrial society, argued that this form of education actually hurts the intellectual and professional chances of blacks.

> Industrial schools must be aware of placing an undue emphasis on the practical character of their work. All true learning of the head or hand is practical in the sense of being applicable to life. But the best learning is more than merely practical since it seeks to apply itself, not simply to the present mode of living, but the larger, broader life which leaves today, perhaps, in theory only, but may come to realisation tomorrow by the help of educated and good men. The ideals of education, whether men are taught to teach or to plough, . . . must not be allowed to sink into sordid utilitarianism. Education must keep broad ideals before it, and never forget that it is dealing with souls and not dollars. (Dubois, 1902, p. 81, cited in Elias, 1995)

Dubois suggests that an implicit goal of education is to prepare for lives beyond education. Therefore, provisions directed towards assisting individuals prepare for occupational pathways that are in some ways limiting and restrictive raise concerns about their worth and purposes. Herein lies a conundrum associated with specificity of educational foci. It is worthwhile when directed to prestigious outcomes, but less worthy when viewed as directing young people to callings that are held to be uncongenial. This conundrum highlights key concerns about educational purposes and how they might be constructed differently across sectors of education and the worthiness of their outcomes and who determines that worth. Many, such as Thompson (1973) and Dubois (1902) above, propose that more general purposes and processes are most appropriate for provisions of vocational education for school-age students, and more occupationally specific purposes for older students. Indeed, Dewey (1916), although a strong advocate for vocational aspects of education, rejected the encroachment of specific vocational education purposes into schooling. Specifically, he challenged efforts to turn schools into preliminary factories at public expense, and also at the expense of key educational values. Instead, Dewey advocated a vocational education emphasising the

> . . . acquisition of specialised skills based on science and knowledge of social problems and conditions and not the acquisition of specialised skills in the management of machines. (Dewey, 1915, p. 42)

He wished to avoid vocational educational provision that focused on purposes associated with the efficacy of business, rather than on meeting the students' needs and aspirations. He wrote pointedly that

> The kind of vocational education in which I am interested is not one which will adapt workers to existing industrial regime; I am not sufficiently in love with the regime for that. It seems to me that the business of all who would not be educational timeservers is to resist every move in this direction, and strive for a kind of vocational education which will first alter the existing industrial society, and ultimately transform it. (Dewey, 1915, p. 42)

These concerns are also evident in more recent criticisms that vocational education has not provided long-term economic benefits for students as measured by income, job stability and employment rates (e.g. Lazerson & Grubb, 1974; Sianesi, 2003). Yet, countering these views are concerns about the seeming irrelevance and disengagement of much of the general educational provisions for young people who are not bound for, or likely to secure places in, higher education and the occupations it serves. This cohort of students often includes the most disadvantaged of learners. Then, there are practices elsewhere which seem to contradict the case for a general educational provision for all young people. For instance, in countries such as Germany and Switzerland, an occupationally specific post-school option is almost the standard alternative to university entrance for school-completing students. These kinds of programmes also report lower levels of attrition than those in other countries.

All this suggests that the purposes for vocational education need to carefully consider how the particular emphases on specific and non-specific occupational focuses might play out for individuals. Yet, the views above consistently and forcefully

argue for the inclusion of moral and intellectual development in vocational education provisions, particular when they are directed at schooling and school-age students. Hence, these perspectives propose that while the development of occupational capacities (i.e. techniques and understandings) is important, that alone is insufficient for a comprehensive form of vocational education. This form of education also needs to engage students in critically appraising the world of work and work-related knowledge, and the particular occupations in which they engage. Certainly, the views above propose that it is necessary to bring questioning insights and alternative perspectives for the purpose of assisting individuals identify and be prepared for their particular occupation (Kincheloe, 1995; Lakes, 1994; Lum, 2003; Quicke, 1999; Steinberg, 1995). Yet, importantly, these perspectives suggest purposes that have both social and individual objectives. These purposes seek to transform society through overcoming injustice and inequity and also seek to make individuals into active agents in serving both their own and societal needs. For instance, advising motor mechanics about the need to be careful in managing refrigerants that if released into the atmosphere might damage the ozone layer or recycling oil products or the careful disposal of batteries and tyres serves community and environmental purposes. Such knowledge also positions the practitioner as active and sensitive to the broader impact of their work, beyond the tasks they perform and the circumstances of those activities.

However, the suggestion that purposes aligned with intellectual and moral development will not arise through experiences other than those within liberal educational purposes still remains. What these associations may deny is that such purposes can be realised through educational experiences other than those intended for liberal purposes. For instance, Anyon (1980) claims that working-class children develop a conflict relationship with capital and that they are not

> . . . learning to be docile and obedient in the face of present or future degrading conditions of financial exploitation, are developing abilities and skills of resistance. (1980, p. 88)

Moreover, the discussion about purposes is incomplete without a consideration of how best to assist individuals in having a long and purposeful working life, including considering and making effective transitions from one occupation to another. These concerns all stand as important purposes for learning beyond the initial identification and development of occupational capacities. Much of adult life is taken up with work of different kinds, much of it unpaid. Hence, the educational focus on occupations and work life can make claims to be broadly purposeful and applicable. In these ways, not all the purposes of vocational education are directed towards preparation for specific occupations. Yet, even when meeting occupational outcomes that are quite focused, vocational education can also be directed towards assisting individuals to identify which occupations best suit their capacities and needs, including the development of critical and informed perspectives of both specific occupations and working life.

Therefore, even when there is a commonly identified purpose, such as the preparation for a specific occupation, there are likely to be diverse orientations and perspectives about its worth from key stakeholder groups (i.e. government, business,

enterprises and students). For instance, common to many governments' policies, and shared by many commentators, is the view that the skilfulness and adaptability of a nation's workforce contributes to its economic standing and development. Here, the purpose goes beyond particular occupational preparation to focus on the development of a larger educational goal, yet seemingly set within increasingly narrow educational expectations associated with being 'job ready' on graduation. Hence, even though many parties agree that a principal purpose for vocational education is to develop a skilful and adaptable workforce, individuals, enterprises, governments and industry will likely couch these in different terms that will require particular kinds of educational goals and processes.

Certainly, if individuals possess the forms of knowledge that permit them to be skilful and adaptable, they have a greater prospect of pursuing their personal career goals as well as meeting their employers' needs for high-quality work performance and contributing to national productivity. Nevertheless, there can be significant differences in what this seemingly common project means to particular students. Individuals' purposes might include being able to secure continuity of employment, advancements or transitions across enterprises with similar occupational activities or to a different kind of employment and, for some, to self-employment. For instance, when discussing their purposes for participating in their vocational education programme on clerical studies, a group of mature female students responded with the following list of reasons:

1. A good job, which is not in a factory and pays well so she can buy a house.
2. Partner wants to retire from train driving in 5 years time and drive trucks. She wants to be the bookkeeper for this business.
3. Has been in catering for the last 10 years but was made redundant last year. She enjoyed some short computer courses and decided to work her way up the ladder.
4. Daughter is now in high school and will need to know how to use computer. It is important that she can show her because daughter has a learning disability.
5. Completed a course last year, Cert. in General Ed. for adults, and decided she wanted to do another course.
6. She is new to the region and hopes to meet people and get some work in office admin, even as a volunteer.
7. She has not been in the workforce for 20 years and wants to bring herself up to current standards and get over her fear of computers. (Billett & Hayes, 2000).

So, although these women were enrolled in a business studies course developed for specific occupational purposes, recognised by a particular industry sector and certified nationally as the course for that sector, the students' purposes for participating were far from being aligned with those intents. Therefore, although the vocational education provision may be seen to be addressing a particular set of industry purposes, it is quite likely that many of the participants have intentions that are quite distinct and personally premised. These kinds of intentions have been shown to be powerful in how people go about their work (Somerville, 2006). For enterprises,

the skilfulness and adaptability of its employees offers the prospect of their being able to maintain their current provisions of goods and services and respond positively to emerging challenges and requirements. However, because their needs can be quite specific, enterprises may want provisions of vocational education to be focused only on those needs (Billett, 2000a). This request is likely to be accentuated when enterprises are sponsoring the vocational education provisions of their staff in some way. Moreover, as these enterprises may be concerned that their highly and broadly skilled workers may well seek more lucrative employment elsewhere, they might restrict the provision of their employees' access to vocational education they sponsor to the enterprises' particular needs. This action may include restricting access to options to ensure that the employees only learn what is required for the enterprise's purposes (Billett & Hayes, 2000). Some may even deliberately restrict the courses available to their employees, thereby denying them the opportunity to complete industry-wide certification. Not surprisingly, unless the enterprise has its own reward and promotion scheme, employees find enterprise-specific training unattractive and unhelpful. For example, workers in the food processing sector, who often lack any occupational certification, were denied the opportunity to complete a certificate in food processing that would give them an occupational qualification (Billett & Hayes, 2000). Not only did the enterprise stipulate which courses employees could enrol in, they also demanded that employees dedicate some of the own non-work time towards these studies. However, these workers who represent those most in need of occupational certification were resentful of the enterprise-specific focus of the course and its failure to provide them with industry-wide content and certification. Again, we are reminded here that more than the sponsorship and interests of stakeholders, ultimately the provision of vocational education is something which is experienced by individuals who then make judgements about whether and in what ways they will participate in these provisions.

Different imperatives of industry and enterprises are another source of tension. States often give industry groups the role of organising the standards and documentation that comprise the syllabus and assessment standards for their sector. For them, the ability for workers to transfer across and within the industry sectors is important for maintaining and developing the skilfulness of industries' workforces. Their considerations and focus for the content of courses will be related to the industry sector as a whole. However, the needs and concerns of enterprises might be quite different. This is because the requirements to perform occupational tasks differ across enterprises, their concerns for the content of courses and assessment will be focused upon the enterprise's particular needs (Billett, 2000b). Therefore, organising a provision that is both industry relevant and meets the needs of the occupation being enacted in particular enterprises with different requirements presents a significant challenge for identifying appropriate purposes. There may also be diverse purposes of both national and state/regional/provincial governments. Government at the national level may well be concerned with overall economic indicators, employment levels and level of expenditure on vocational education, while a more local government may be concerned about the provision of the skill needs of particular

enterprises, or maintaining the skill and employment levels of the state's economy. As Elias (1995) notes, government may well blame vocational education for not generating enough skilled workers at times of skill shortages, or the particular qualities of its graduates during periods of high youth unemployment, and then seek to closely manage the educational provisions.

Moreover, at different moments in history, national governments may have purposes for vocational education that are quite distinct. When undertaking my vocational teacher education in the late 1980s, a significant policy question I had to address in my assignments was what kinds of educational provisions could be organised to assist adults use up all their extra leisure time that contemporary life had provided for them. Yet, at the time of preparing this manuscript, most governments in advanced and developing economies are increasing the retirement age and expect individuals to work far longer and more productively. The concept of employability is being exercised by both governments and global agencies referring to how individuals can remain work effective and competent longer than previous generations and in a time when work requirements are constantly changing, more so than in earlier times. As well, there is an expectation that individuals will take responsibility for much of that learning. Governmental imperatives are likely to be responsive to contemporary issues and the focus and form of these will change and fluctuate in intensity over time. When there are periods of high levels of youth unemployment, measures are introduced to support educational provisions. These make few demands upon employers about their sponsorship of apprenticeships because governments want to encourage enterprises to support apprentices. Then, when there are high levels of skill shortages, governments may well request that the duration of training be reduced to meet the needs of enterprises that are complaining that they cannot get enough skilled workers. Government at the regional level might also be concerned about micro-social purposes such as the availability of vocational education in order to retain young people within that region. Hence, they want a comprehensive provision of vocational education in their regions, whereas central governments may well be trying to rationalise provisions and reduce costs through seeking cost-effective and resource-intensive provisions of vocational education (e.g. flexible delivery). In this way, it can be seen that there are distinct perspectives even when there is a shared purpose of a vocational education project.

These perspectives also extend to the degree to which industry and enterprises make demands upon the vocational education system. For instance, White (1985) reported the difficulty of engaging with industry to advise on curricula in the 1980s because they were focused on maximising profit in very positive economic times. Employers' representatives claimed it was others' business (i.e. educators) to get this right, not theirs. Yet, a decade later the same voices were saying that vocational education had failed industry and was responsible for skills shortages and so on, and that employers had to provide leadership (Ghost, 2002). Consequently, it is important to understand that the purposes of vocational education are multiple, have worth that is premised upon a range of perspectives and are prone to fluctuate and have distinct emphases over time. The following section seeks to categorise and delineate this array of purposes and perspectives within vocational education.

Vocational Education: Purposes and Perspectives

So, as outlined above, the purposes of vocational education encompass assisting individuals identify their suitability and readiness for occupations, the initial development of occupational capacities and further development of these throughout individuals' life histories. Yet, there are social and environmental purposes as well.

Personal purposes, for particular individuals, are associated variously with

- understanding about work life,
- developing specific capacities to perform a particular occupational role,
- the capacity to engage critically in the world of work,
- transforming the social practice comprising paid work or specific occupations,
- maintaining a capacity for lifelong employment.

Purposes that have a more social orientation comprise

- developing the kind of capacities required by employers,
- developing the kind of capacities needed to sustain and develop further an industry sector,
- practising that occupation in ways that are mindful of environmental and community concerns,
- developing the capacity to contribute towards national economic well-being,
- assisting workers to resist unemployment.

From these listings and the discussions above, it is possible to delineate a set of categories that articulate diverse purposes for vocational education. These categories are held to comprise purposes associated with (i) cultural reproduction, remaking and transformation of occupational practices, (ii) economic efficiency, (iii) societal continuity, (iv) individuals' fitness for particular occupations and readiness to engage in work life and (v) individual progression and continuity. Each of these purposes has particular qualities that sometimes overlap, and are outlined below.

1. Cultural reproduction, remaking and transformation of occupational practices includes
    - the continuity, maintenance and transformation of culturally derived occupational practices that are essential to countries, communities and individuals,
    - transformations of practices in response to changing societal concerns and emerging imperatives that society needs to embrace, such as sustainability.
2. Economic and social efficiency and effectiveness includes
    - developing capacities to sustain and develop particular industries and specific enterprises,
    - meeting particular occupational requirements,
    - developing the capacities that enterprises' need for continuity and expansion.

3. Societal continuity and transformation includes
   - reproducing societal norms and values,
   - transforming society and its norms and practices,
   - developing the capacity of citizenry to both secure employment and resist unemployment,
   - meeting the educational and work preparation needs of particular cohorts,
   - securing the range of occupational competence that societies need,
   - contributing to the general education of the citizenry.
4. Individuals' fitness and work readiness includes
   - identifying and guiding individuals towards occupations and careers in which they are interested and are suited for,
   - developing individuals' capacities in occupations to which they are suited and prefer,
   - gauging and meeting students' needs and readiness to work and learn,
   - providing experiences of work, in the world of work,
   - engaging reluctant learners in educational activities.
5. Individual progression includes
   - supporting development across working life,
   - assisting work and occupational transitions,
   - assisting the development of learners whose needs and capacities transform throughout the life.

In the following sections, these five sets of purposes are elaborated.

Cultural Reproduction, Remaking and Transformation

An important and fundamental purpose for vocational education is to reproduce, remake and transform the culturally derived occupational practices that society needs (Skilbeck et al., 1994). These are important education roles and educative goals within themselves. The capacity to pass on cultural practices from one generation to the next is a quality which is unique to the human species and distinguishes us from other species. As a process, it is also educative with individuals developing capacities through the process of learning particular sets of cultural practices (Thompson, 1973). As proposed earlier, human occupations arise from and address important human and cultural needs. Yet, despite this and societal reliance upon the kinds of cultural practices that constitute occupations, Elias (1995) suggests that most justifications for having vocational education and curriculum are tightly economic. Certainly, this narrow economic view is commonly rehearsed by governments and industry, and in workplaces a concern for economic imperatives is often promoted, albeit as just one basis for considering vocational education. However, beyond economic considerations is the importance of maintaining capacities within

the community to perform the important social functions that comprise individuals' occupations. The limitation of a narrow economic perspective is that such a view denies a range of issues associated with the well-being, identity and needs of those engaged in occupational activities. For instance, class identity is similarly remade or reproduced through individuals' engagement in such activities (Willis, 1978). Moreover, economic imperatives are not the sole province of vocational education. Compulsory and higher education provisions, in both explicit and implicit ways, also reflect these concerns.

Continuity and Transformation of Occupational Practice

The continuity of salient and enduring cultural practices can be realised through vocational education. The occupations that individuals practise have arisen over time through their capacity to meet human and societal needs, and these are an important and very worthwhile consideration for vocational education: it generates socially important knowledge and practices. Moreover, occupations are transformed and in some cases rendered obsolete by these changes. So, for instance, the occupations associated with manufacturing garments have changed to meet the needs of mass manufacturing, the availability of inexpensive fabrics and new kinds of fabrics and the globalisation of the garment manufacturing and its growing concentration in countries with low labour costs. Yet these occupations are sustained by the ongoing need for clothing. However, the work of vital occupations in earlier times, such as masons, fletchers and coopers, has declined as significant and common forms of employments, as, respectively, the need to shape stone, make arrows and barrels has declined. Occupational practices have also been transformed through history as either the means for enacting those occupations change (e.g. technologies and tools) or goals for those occupations change (e.g. the requirements for greater specialisms or more broadly based work requirements) (Billett, 1996). As each generation takes up this new knowledge, these changes become advanced within the community. Take, for instance, the need to use nails to fasten things made of wood. Over time, the use of nails has led to the development of a range of different nails and hammers and techniques for their different kinds of uses. This has included tiny tacks and corresponding size hammers used in glazing and carpeting, for instance. These tools require particular skills to use. However, just as the nail gun has become a common tool on building sites as compressed air has become readily available, so too have glaziers turned to diamond-shaped staples to hold glass in window frames and strips of nails are used by carpet layers. So, as occupational practices transform, the occupational practice is remade through such transformations.

Yet, in addition to significant transformations in practice such as these, there is also the constant work of remaking occupations as each generation of workers enacts those practices in meeting the requirements of particular workplaces and at particular moments in time. When engaging in our everyday occupational activities, we are enacting and remaking those activities at a particular point in time and in response to particular problems (Billett et al., 2005). At the same time, individuals are educated in the process of remaking culture (Thompson, 1973). That is,

when these tasks are undertaken they are done so by individuals using procedures that have been developed in earlier times and through earlier experiences that are now being applied in the present. They also participate in remaking or reproducing the societal sentiments, such as class identity (Willis, 1978), and the esteem associated with particular occupations through this process of learning. Hence, the learning of occupations is inevitably unfinished business as Williams (1976) suggests. He refers to the importance of individuals shaping and reshaping what they do in real circumstances and from different and distinct points of view, thereby emphasising individuals' proactive roles in this process of constant remaking. This ongoing remaking is, therefore, essential because the purposes of, procedures for and conceptions of these occupations are not universal or uniform. They are shaped by situational requirements, as well as societal expectations (Billett, 2001b). As well, a whole range of occupations that serve human needs in the form of specialist skill or advice exist and prosper because of the need for them.

Education systems and, perhaps, particularly vocational education play a key role in sustaining the continuity of these occupations and, thereby, addressing important cultural needs. It has been suggested that, whereas in earlier times such skills could be developed within the family, the complexity of the contemporary requirements for occupations means that it is now beyond the capacities of families to develop the kinds of capacities required for work. This includes the claim that the extent of knowledge required in contemporary practice is often beyond that which can be provided by a single individual (Hirst & Peters, 1970), or that not all occupational practices can best be learnt through observation and imitation alone (Lave & Wenger, 1991). Therefore, preparation for an occupation now requires the assistance of a range of suitably specialised individuals who can assist learners to access this knowledge. Indeed, as proposed in Chapter 5, the provision of specific learning experiences (e.g. anatomy classes) and particular educational resources (i.e. textbooks) seemingly both arose from the inability of medical practitioners in ancient Greece to provide the range of experiences for their students that they had previously been able to (Clarke, 1971). Hence, the need for a specific experience to understand human anatomy and also some codified form of descriptive knowledge was required and these emerged through not being able to provide these experiences through practice.

Of course, the assumption here is that the requirements of contemporary practice are greater than in the past. This may or may not be the case. The breadth of practices skilled workers required in earlier times was not assisted by the more sophisticated and often specialised tools of their contemporary counterparts. They had to rely more on their own knowledge and skills and traditions for decision-making. For example, farmers' decisions about when and what to plant were based on traditions and their observations and predictions. Alternatively, the requirements of contemporary work may well be more demanding in some ways and the range of factors to consider through practice may be far greater. Certainly, the duration and extent of preparation for an occupation (e.g. as in apprenticeship) was often far longer than is currently the case. Yet, this preparation often occurred in the absence of what educational institutions could provide to support this preparation. So, in the past, individuals may well have had a greater reliance upon their

role in understanding and a range of procedures to secure or particular work outcomes without access to the same range of tools and assistance that contemporary workers enjoy. However, conversely, the requirements for conducting that work may well have increased (Appelbaum, 1993; Bailey, 1993; Barkey & Kralovec, 2005). In particular, the demands for the learning of knowledge that is not easily representable (e.g. symbolic, conceptual) may well demand particular kinds of instructional strategies (Martin & Scribner, 1991; Zuboff, 1988).

As proposed in the previous chapter, the organisation and institutionalisation of developing skills through educational institutions came about because of the decline of craft organisations and guilds in many European countries (Greinhart, 2002). Since this occurred in an era of developing new sets of institutions, it led to the need for educational institutions to play important roles in the continuity of supply of these forms of occupations. Certainly, with the shift to factory-type production from family and home-based (e.g. cottage-based work models) in the industrial era and the need for developing skilled workers for such workplaces, vocational education systems came to play an important role in the supply of available skilled workers. This role continues to this day. This is not to suggest that the purpose of vocational education as cultural reproduction can only comprise provisions based in educational institutions.

However, elements of these societal expectations are associated with this important process of cultural reproduction. These expectations include the need for certainty about the levels of competence for those who perform particular occupations that led to the need for certification and qualifications as administered by state bureaucracies. Hence, arising from the cultural need to maintain the supply of certified skilled workers, vocational education has come to play a central role. In this way, a fundamental purpose of vocational education is the process of cultural reproduction through the supply of skilled workers to meet vital, necessary and desirable needs within the community. This can only be achieved through passing on the legacy of what has been learnt through cultural practices across generations of workers. Vocational education has a purpose associated with securing the continuity of human culture, albeit through reproduction, remaking and transforming those practices.

Economic and Social Efficiency and Effectiveness

Work activities are held to be undertaken more effectively, and labour can be utilised more efficiently when there is a skilful workforce (Mincer, 1989). This is the key case for the human capital claims for vocational education. Consequently, from both a personal and social perspective there are purposes for vocational education focused on economic efficiency. Without doubt, this is often of great interest to those who speak on behalf of particular industries and also those who employ within enterprises. That is, they need to be assured that the skills of the workers they employ meet their needs (Billett & Hayes, 2000). These imperatives are sometimes concerned with the profitability of the workplace and/or its capacity to deliver services efficiently and effectively. Such concerns span both the private and public

sectors and reflect concerns about economic and social efficiency. Just as effective private sector organisations aimed to deliver services and goods in ways which meet clients' needs and sustain those organisations and workers' employability, the same can be said for those that aim to deliver social services, such as health care. Yet, this particular purpose is contentious and raises serious questions about in whose interests the educational system is being enacted. For instance, although a strong advocate of vocational education, Dewey (1915) was critical of the creation of separate vocational schools. He saw these strategies as efforts to turn schools into places that developed industry-specific skills at public expense, and also potentially at the expense of many core educational values. Consequently, philosophical criticisms of vocational education have focused on its role in preparing individuals as units of production, not as being valuable in themselves. That is, vocational education is sometimes seen as not being concerned with intellectual and moral development (Elias, 1995), because they are often not directly taught. Indeed, Dewey advocated for vocational education by emphasising the 'acquisition of specialised skills based on science and knowledge of social problems and conditions and not the acquisition of specialised skills in the management of machines' (Dewey, 1915, p. 42). He was concerned that the educational provision was becoming focused more upon the efficacy of business than on meeting the needs and aspirations of students.

Of course, educational purposes that are seen to be inherently narrow and to restrict options and possibilities for learners are questionable and deserve critique. However, such a critique is rarely directed towards occupational development that occurs in universities (e.g. schools of medicine, engineering and law). This selectivity suggests assumptions about the narrowness of educational purposes being enacted through vocational education that are not evident in higher education and for the most prestigious occupations, where it is seen as a virtue in the form of specialisation. Yet Dewey's concerns may be well founded, in situations where the spokespersons from industry have been in the ascendancy in decision-making about vocational education; many of the intended goals and objectives and processes for realising them may be ill informed. That is, the concern seems to be not so much that they are representing industry interests, but instead that the educational decisions they make and the means they adopt to manage and enact the educational provision are unhelpful, naive and often contradict their own goals. Again, there is truth in such assertions, particularly where vocational education is used to provide a pool of skilled but unemployed workers who might undermine the standing of the work and employment conditions for that form of work. For instance, the very constraints that professional medical bodies place on the number of medical graduates and which sustain their scarcity value are not exercised within occupations served by the vocational education system. Indeed, in some countries (e.g. Australia) imperative to encourage employers to sponsor apprentices has led to agreements by which apprentices lose their employment upon completing their indenture. That is, government, industry and unions have agreed that once an apprentice completes their indenture, their employment with their sponsoring workplace is terminated. Of course, many workplaces elect to re-employ hard-working and competent apprentices as tradespersons.

Developing Capacities Required for Effective Work

So, there is a need to provide an educational provision that supports and sustains the production of goods and services that the community requires as well as the need for efficiencies in their provision. This might include making resources more widely available as expectations increase, or simply utilising most effectively the available and possibly scarce resources. Certainly, although the requirements and capacities to mass produce items existed in China two millennia before it was a focus in western societies (Ebrey, 1996), the move to industrialisation and what followed has become a dominant feature of contemporary western societies. Hence, a close link has been established between economic efficiency and state-based provisions of education. Indeed, from its inception, public education and certainly vocational education has had an economic basis couched in efficiency even if it is not always explicit in practice (Bowles & Gintis, 1976). Indeed, much of the focus of schooling is indirectly aimed at distributing opportunities that have an economic basis, with efficacy as its principle. Moreover, there is a clear and consistent correlation between levels of education and remuneration (Grubb, 1996), extolling high salaries as a reward for efficiency, as well as demands of work. As cultural need expands or becomes more specific, populations grow and, thus, resources must be effectively deployed to meet their needs. However, while this view emphasises the societal view of that form of work, it also tends to downplay the role, sense of self, identity and material benefits which might accrue to individuals as a result of vocational education, that is, the personal efficacy of being skilled, having skills and being skilled in a way which can sustain a decent livelihood over time. Yet, it was economic efficiency that did much to drive the interest in vocational education.

The relationship between education and economic efficiency is perhaps most famously and strongly exercised through the Scientific Management movement and its educational analogy of behaviourism. Garrison (1990) suggests that in the era of machine production, Frederick Taylor's principles of Scientific Management were meant to achieve what Newton's principles of physical force had done in a previous time:

> Just as in physical nature there is a one most efficient, most economical way for things to move about, so too there was for Taylor 'always one method and one implement which is quicker and better than any of the rest,' the one best system, and 'this one best method and best implement can only be discovered or developed through a scientific study and analysis of all of the methods and implements in use. (1990, pp. 392–393)

Taylor's ideas were most welcome at this time in America, and became popular elsewhere. Garrison (1990) notes that in the years leading up to the Smiths–Hughes act, which formed the vocational education system in the United States, strong support for Taylorist efficiency was provided through the popular press (e.g. *Saturday Evening Post* and *Ladies Home Journal*), by leaders in the study of educational administration (e.g. Franklin Bobbitt and Ellward Cubberly) and by industrialists. One such industrialist, James Monroe, while president of the National Society for the Promotion of Industrial Education, confidently claimed that 'what the country and what the community wants of the school is efficiency' (Garrison, 1990, p. 393).

However, critics viewed such efforts as attempts at social control, the ascendancy of society over its members. In Garrison's account, Ross (1896) suggests that such ascendancy does not arise:

> . . . until the feelings have been changed in force and direction, not until the crossings and lashings of many desires have neutralised opposing impulses and achieved a kind of artificial parallelism of wills, we must predicate the presence of society with all its characteristic workings. (p. 393)

In this way, Ross articulates clearly the sentiment expressed across this text that there is a need for a consideration of the interdependence between societal and personal facts and factors in the consideration of work and education. That is, as Garrison (1990) quips, by suggesting that human forces (e.g. feelings and will), like physical forces, could only be harnessed by recognising Newton's third law: for every action there is an equal and opposite reaction. Indeed, Ross (1896, cited in Garrison, 1990) suggests that the premises for an efficient system of schooling would be accounting for 'the facts of personal and social life'.

Developing Enterprises' Capacities for Continuity

Beyond these broader sentiments about the worth and form of efficacy and its prospects for being secured, concerns arose about the extent to which provisions of education could meet two goals associated with economic efficiency: (i) securing particular occupational requirements and (ii) developing capacities that enterprises need. Surprising for some, these two concepts are often quite distinct. Occupational, and, sometimes, industry, requirements are usually those associated with promoting the occupation as a practice that has some common meanings and a set of canonical knowledge that all those who practise are supposed to possess. These interests are exercised by institutions (e.g. professional associations, unions) and agencies, and industry advisory bodies who speak on behalf of the sector or occupation. However, these voices often appear to have a different focus from those within enterprises (Billett & Hayes, 2000). It is enterprises who actually employ, engage in productive or service tasks, and who may make decisions about the sponsorship of their employees' vocational education and training. The 'industry' perspective has concerns with the quantum of skilled workers and the quality of their preparation. These concerns include the provision of nationally consistent courses able to develop the knowledge which permits those who are employed in industry sectors to respond to the demands of enterprises, but also to move across enterprises in that sector. Industry is concerned with the overall level of skilfulness required to maintain and develop a particular industry sector. Enterprises, however, want workers whose skilfulness is able to address their existing and emerging challenges (Carnevale, 1995; Rowden, 1995; 1997).

Indeed, to meet their particular needs for economic efficiency, enterprises want two levels of customisation of vocational education programmes. First, they want the curriculum to be customised to their industry by creating a range of modules from which they can choose those which pertain to their workplace. Secondly, they

want the modules themselves to be made more workplace-specific (Billett & Hayes, 2000). Within all of this, considerations of individuals' identity formation and sense of self can easily get marginalised. Yet, there are likely to be quite distinct outcomes required by particular enterprises and these are likely in some ways to be different from what 'industry' or those reflecting the needs of the occupation (e.g. professional associations) want. Of course, the risk with economic efficiency is that the quest for pertinence in educational purposes will work against those that have applicability for the industry or occupation, and may even work against the needs of students and workers to have adaptive knowledge. The needs of individuals who participate in vocational education are at greater risk of being displaced by arrangements that focus on just one set of specific economic needs. However, there is a risk that such specific focuses on economic efficiency may well be to the detriment of long-term efficiencies, because these requirements can change or be transformed very quickly. Individuals engaging in their occupational practice are now being viewed as having personal and occupational goals requiring knowledge that is robust enough to permit them to find employment and secure those goals. This has become more so the case since lifelong learning has been reshaped to refer to learning across working life (OECD, 1996). In this account of lifelong learning, workers are expected to take greater responsibility for maintaining their employability. That is, there is a personal dimension to considerations of economic efficiency that is not always understood and is also often less easy to be represented than those of enterprises. The capacity to meet changing needs will be partially premised upon the kinds of capacities that individuals have and their ability to adapt to change.

However, of these interests, the bipartite 'industry' voice (i.e. between representatives of employers and employees) is the one that has been most co-opted by government to advance its views, policy and the implementation of practices determined by these policies. Yet, these voices are not always informed or astute. Often, governments garner their interests because it is claimed that they can best represent the industry and can inform policies and practices. In contrast, those in education are not seen to adequately understand the requirements of work and workplaces. If this proposition is true, presumably so also is the converse (Billett, 2004). That is, industry representatives may not understand adequately the processes and outcomes of education. One example of the ideas that are generated in trying to secure economic efficiencies from education provisions per se is a development and enactment of generic employability skills. The strategy adopted in the United States (The Secretarys Commission on Achieving Necessary Skills (SCANS), 1992) and Australia (Mayer, 1992) is to identify and teach a set of generic skills that are optimistically held to be common to and applicable across workplaces. These skills are assumed to be enduring, thereby permitting individuals to maintain the currency of their vocational practice. Statements of these generic competences have been developed across a range of countries and always by government in an attempt to develop a set of educational purposes that have direct relationships to workplace requirements. So, regardless of whether the course of study is of a non-specific kind (i.e. general education) or an occupation-specific kind, the content, teaching and assessment need to take account of these educational goals. Ghost (2002) proposes that

schools have to make young people 'job ready'. This, of course, is a difficult task, when the occupational choice of the young person is still nascent, not to mention that the particular requirements of enterprises are often quite unique and need to be understood and addressed before job readiness can be secured. Yet, these generic competences are seen as a way of achieving a vocational education outcome aligned with economic efficiency, with an emphasis on individuals' capacities. That is, if all young people have these capacities, then they will be more employable (i.e. more likely to be employed) and will have greater employability (i.e. more likely to be effective in the workplace, and therefore remain employed).

In Australia, for instance, through the establishment of key competencies by Finn (1991), then through the Mayer Committee (1992) and later the Business Council of Australia (Department of Education Science and Training, 2002) there have been attempts to establish broad areas of competence within work activities. These competencies or outcomes are proposed to be of a general kind that can be applied to work regardless of context. Hence, the concern here is to identify how to secure these competencies and of vocational education's role in developing transferability of students' knowledge associated with these competencies, that is, making students' learning robust enough to transfer not only from the schoolroom to the workplace, but across workplaces. These key competencies are nominated by industry and which, if developed in learners, will enable them to be effective participants in workplaces. The Mayer key competencies, for example, are as follows: (i) collecting, analysing and organising information, (ii) expressing ideas and information, (iii) planning and organising activities, (iv) working with others and in teams, (v) using mathematical ideas and techniques, (vi) solving problems, (vii) using technology (Mayer, 1992). Others have followed, but Mayer's competencies and ones used in other countries articulate similar sets of concerns. Business has repeatedly proposed the generic competency route as a means to develop capacities that are held to be common to all forms of work and requirements of workplaces and also to address the constantly changing demands of workplace requirements. Ghost (2002, p. 63) exhorts educators to 'recognise the constantly changing skill requirements of industry. What may be relevant today to enterprise's skill needs may have no bearing on the same enterprise's skill needs in five years time'. However, he offers no scheme to address educators realise these demanding educational goals.

Certainly, there is little to indicate that the kinds of generic capacities outlined above will serve these purposes (Beven, 1997). Interest in identifying generic skills is one of the few instances where research conducted during the 'cognitive revolution' – a period of intense scrutiny of human performance by cognitive psychologists – has influenced policy. However, it was an inept and partially informed choice. A key goal of some cognitive psychologists (e.g. Ericsson & Smith, 1991) was to identify general problem-solving strategies: heuristics that can be applied generally regardless of circumstance, context or discipline. However, these strategies have not been found to be successful except at the broadest level (e.g. think before you act) (Evans, 1993). Indeed, a key outcome of the 'cognitive revolution' is that individuals' memory, rather than their processing capacity, underpins competent performance or expertise (Glaser, 1989). The knowledge individuals need to learn

is referred to as being domain specific, that is, related to a particular area of activity (i.e. particular paid vocation), which is in contrast to the generic skills approach that has been promoted by government and industry. It is a profound understanding of a particular set of activities that distinguishes competent workers from less-competent workers (Glaser, 1984). Moreover, an understanding of the situatedness of performance is emphasised in recent accounts of competent performance (Billett, 2001b; Engestrom & Middleton, 1996). A critical understanding of how such capacities are manifested in particular kinds and forms of paid employment would be far more helpful. That is, such statements of workplace competence are embedded within two levels of contextualisation: the occupation and the workplace practices.

So, there is understandable interest in social and economic efficiency as purposes for vocational education. The efficient use of worker skills and their effective application is obviously a desirable outcome for workers, their employers, the progress of their industry and national economies. Hence, because this emphasis has become so salient to governments' key economic interests, the risk is that a narrow focus on economic efficiency will overwhelm and distort not only the means of achieving this goal but also the purposes of vocational education. Yet, these measures may not be in the interests of individuals or industry, if they are too enterprise specific, not meeting the needs of enterprises if they only reflect national statements of occupational requirements, etc. Consequently, although economic efficiency is an understandable and important goal for vocational education, it needs to be understood in terms of what such a goal means at the occupational, workplace and personal levels, rather than assuming that the same set of economic purposes are applicable across all of these levels.

Societal Continuity and Transformation

Having considered the continuity of cultural practices, and industry and enterprise requirements for efficacy and effectiveness, there are specific purposes associated with societal continuity that vocational education is to realise. As foreshadowed in the earlier chapters on vocations, occupations and the purposes of vocational education, one of vocational education's key contributions is to societal continuity, and the means through which societal stability can be secured (Thompson, 1973). For instance, the Talmud states it is the duty of a father to teach his son the law and a trade. Bennett (1938) claims that the tradition within Jewish societies was for the son to go to the rabbi's school in the morning, and in the afternoon learn his father's trade, and that these laws were directed to societal stability.

> He who does not have his son taught a trade prepares him to be a robber and disobedience to this ordinance exposes one to just contempt, for thereby the social conditions of all are endangered. (Leipzigier (1890), cited in Bennett (1938, p. 3))

For Plato also, education is a major concern of the state because of the need for continuity. He proposed that individuals are to be educated in accordance with the needs of the state and according to their natural endowments (Elias, 1995). However,

three distinct forms of education were proposed for three classes that made up the state: artisans, military and rulers.

> Persons should be educated and trained in accordance with what they were good for, a practice that would also secure the good of society. A physical, military and moral education is suited for the warriors or guardians. A full intellectual education should be given to the rulers of the state. In Plato's opinion people should stay for their entire lifetime of the position for which they are suited. Vocational training is appropriate for the working class, in the form of apprenticeships. (Elias, 1995, p. 166)

Consequently, what Plato proposed here was that the concerns of society were paramount and should be privileged over concerns about individual progression, which was less of a priority and likely was unwelcome, except with freeborn Greek males. Such a view of societal interests, however, also stood to protect the interests of those elites and maintaining the existing societal order. Of course, such views are hardly surprising for a society premised upon the use of slaves and where hierarchies worked in the favour of those in powerful positions. Moreover, when added to what else was privileged in these arrangements, such as views about the mind being superior to the body, and the presumed limited capacities of those individuals who performed more menial forms of work, such precepts can be seen as being powerful in shaping the kind, quality and extent of education that was likely to be distributed across these three classes. Aristotle's views on these issues are similar to Plato's. Aristotle accepted that some people are marked out to be slaves from birth and the highest form of activity is contemplation by the mind. These views reflect, again, the social arrangements in a slave society where slaves worked with their hands, thereby freeing up others (e.g. elites) to engage in contemplative pursuits.

> Thus, although farmers and artisans are necessary for the life of the state, they should not enjoy the rights of citizens. (Elias, 1995, p. 167)

In this way, discussions about the degree to which vocational education should meet the needs of society or individuals also need to include a critical appraisal of what constitutes the society and how the interests of its members are being exercised, and perhaps in bringing about change. Of significance here is that the forms of occupation that are now referred to as professions were equally seen to be work that were not worthwhile pursuits for freeborn Greeks. So, continuity brings with it precepts that educational provisions may be expected to reproduce. These are sometimes powerful and enduring. For instance, the classical traditions emanating from ancient Greece that made a sharp distinction between education for the mind (i.e. leisure) and education for work were part of the societal sentiment that was prominent through this period and has extended to contemporary times. In particular, these contrasts (i.e. liberal versus vocational education) and dualisms (i.e. privileging of the head over the hand) 'have plagued Western society to our day' (Elias, 1995, p. 168). So, these societal sentiments privileged particular kinds of work, including the development of the techniques required and the need for education of the whole person (i.e. their mind), but not for everybody.

Of course, sitting within this precept was a view that many occupations were not worthy of an educational provision. Moreover, those kinds of people who performed

such occupations were unlikely ever to benefit from an education because they were inherently incapable of deriving such a benefit (Farrington, 1966). This precept is similar to what was central to the social efficiency improvement that had particular purchase within considerations of vocational education in some countries, probably most notably the United States. For instance, David Snedden believed that many individuals from low economic societal classes were simply incapable of engaging with educational provisions that included abstract knowledge. Consequently, an extension of the most basic compulsory general education would be wasted upon such individuals and the most efficient response was for a training regime which prepared them for very specific occupational roles (Bellack, 1969; Kincheloe, 1995). It was this kind of sentiment that Dewey argued against in his debates with Snedden (Dewey, 1915/1979), and which likely hardened his views about the purposes of vocational education. In this way, not only was an educational provision positioned as being not able to develop further the innate limited capacities of these learners but it was also positioned as a means by which their limited capacities could be best shaped to provide them with very specific skills that would locate them at the lowest strata of the paid workforce (Kincheloe, 1995).

It is perhaps because of its apparent utilitarianism that vocational education has been relatively neglected by educational philosophers (Elias, 1995). Indeed, much of the reference to vocational education within the philosophical literature focuses on the degree to which an occupationally specific focused provision of education can be viewed as being legitimate. Often, the discussion is premised on contrasting vocational education with what is referred to as a liberal education, with the latter being inevitably valued over the former. As well, such a discussion is not particularly reflexive about what constitutes an educational provision without a specific and applied focus. For instance, Bantock (1980, p. 26) claims that the cause of liberal education was strong in the nineteenth century because it represented a reaction against concerns about the excessive practicality of public education provisions. Bantock (1980) suggests that by implication, if it constituted practicality then it should be avoided. Yet, this liberal education was particularly evident in educational provisions for elites. Across Europe, for instance, the models of a good liberal education could be realised through the British grammar school, German gymnasium and French lycee, which were set apart from burgeoning compulsory education. Yet, these forms of schooling were indirectly vocational as they provided both preparations and pathways to the professions and, thereby, fulfilled a specific occupational function, albeit indirectly.

So, whilst the classic tradition of education has endured within Western societies, there has always been an element of education for work within it. For instance, Elias (1995) proposes that even in mediaeval universities where the classical education (i.e. liberal education) was dominant, these universities were actually organised for the practical purposes of preparing clergy, teachers, lawyers and physicians for society.

> Though this education had few practical components, its purpose was certainly vocational and the materials used more on the practice of medicine and law. Thus the mediaeval universities departed from the institutions of higher learning in the ancient world which did not educate for work. (1995, p. 168)

Interestingly, Elias goes on to note that in contrast to what occurred in mediaeval universities, which had clear vocational educational objectives, this was not the case for the lower schools of the time. They were designed to teach basic literacy, form moral character and nourish spiritual life. 'At this level, the practical skills needed for earning a livelihood in society were learnt from various types of apprenticeship arrangements' (1995, p. 169). This separation exemplifies the kind of dualisms that underpinned views about education for societal continuity, including vocational education, right up to and including contemporary times (Lum, 2003).

The provisions of vocational education developed as mainly a family-based activity to generate occupational capacities, and then as a societally organised educational sector to develop the kind of skills that societies needed and to engage young people in activities which were congenial to society. As noted, this contribution to societal continuity has at least four parts: (i) securing the range of occupational competence that societies need, (ii) developing the capacity of citizenry to secure employment and resist unemployment, (iii) meeting the educational and work preparation needs of particular societal cohorts and (iv) contributing to the general education of the citizenry. There is considerable overlap in these four purposes, as Skilbeck noted:

> On the one hand, preparation for vocations is a dimension of education for life, of which work in some form is a universal attribute. 'Vocationalism' is a process or activity, the imparting and the acquisition of broadly defined skills and knowledge believed to have a discernible relationship with the capabilities needed for productive work and required or expected of workers, now and in the future. On the other hand, vocationalism is a function, whereby the education system services the workings of the economy, deriving its purpose and rationale from some assessment of economic need and requirement such as trained manpower for the labour market. Both dimensions draw attention to the fundamental importance of vocational education in any society. (Skilbeck et al., 1994, p. 5)

Indeed, as mentioned earlier, the development of the vocational education sector in countries such as France, Germany and the United States, and possibly others, was associated with at least three goals associated with societal continuity (Dewey, 1916; Gonon, 2009a; Hyslop-Margison, 2001; Troger, 2002). These were (i) meeting the skill, the community and the industry needs, (ii) engaging young people to avoid them drifting into idleness, crime or revolutionary ideas and (iii) developing the kinds of capacities that would secure them paid employment. In doing so, these provisions also sought to realise important democratic ideals about participation in society. To elaborate these particular sets of purposes, each is now discussed in ways that also capture something of the historical development of vocational education.

Securing the Range of Occupational Competence That Particular Societies Need

From its earliest manifestations, the need for skills required by societies to function and be sustained has been a key driver behind the existence, development and form of vocational education. These early manifestations were also often shaped by very local concerns and factors as this represented the bases of human organisation in

most but not all societies. Hence, it was localised concerns, often at the family level, that led to the development of the skills which were acquired to sustain the family's livelihood either as a set occupation whose services (e.g. millers, carpenters, farriers) were drawn upon by the community or as a producer of goods (e.g. farmers, blacksmiths, goldsmiths, fletchers, coopers). Before industrialisation in most western societies, the local community's needs and the family business would have been the key imperatives for developing occupational skills. The orthodoxy until relatively very recent times was for the majority of this learning to occur within the family in both in western and many eastern countries. Almost universally, the development of the occupational skills was furnished through family-based apprenticeship arrangements with adults teaching and engaging their children in a process of skill development. This model was then augmented by taking on other people's children either in a process of direct payment or through some system of personal or financial indebtedness. In many cases, this process involved the child coming to live in and with the family of the tradesperson. This kind of arrangement still exists both in eastern and in western societies. Seemingly, prior to the Cultural Revolution in China there was still the practice of skilled workers taking the children of other families either through a payment process or as a favour to a respected individual (Butterfield, 1982). Moreover, and staying with China, in its process of industrialisation that occurred two millennium before that within Europe, the mass manufacture of artefacts occurred in ways that emphasised local and family-based development of skills, in at least some instances. For instance, the famous Terra Cotta Warriors were all contracted individually by teams of workers (Portal, 2007) as discussed in earlier chapters. However, it seems that these teams were drawn from different communities with the supervisors indicating their names and locality on each warrior. Hence, the development of these capacities likely occurred at the local level.

However, with the transformation of the nature of work and how it was organised over time, and particularly with the shift of workers away from their own businesses and into factories through the period of industrialisation, the mode and form of vocational education changed to reflect this societal transformation. Yet, whereas the establishment of vocational education systems in countries such as Germany and France was a response to industrialisation, Hyslop-Margison (2001) makes the point that in America it was introduced deliberately in order to shift from an agrarian to an industrial economic base. Indeed, as markets became more accessible and the concentration of manufacturing capacity occurred, there was a need for the development of skills of a different kind for many emerging occupations. The breaking down of the family as a unit of economic production with industrialisation and also the dismantling of the guilds in many Western societies led to the need to secure the development of the kind of skills which these societies needed to sustain and develop further their economic activities. So, these societal transformations coincided with the need for the development of vocational education systems and institutions that were quite separate and distinct from a family-based provision. Given the need to respond to the requirements of changing occupations, industry needs and the growing requirement for economic competitiveness, there emerged urgency for vocational education to fulfil important societal roles in providing the

supply of skilled workers who could meet these emerging societal requirements. This imperative has strengthened and extended to all sectors of tertiary education, including universities. The focus on developing effective practitioners has become a key driver for these institutions, guided by standards and requirements that are articulated by professional bodies, industry groups and, usually, endorsed by government. Furthermore, and as discussed in the next section, threats to societal well-being or even survival have been expressed in efforts in many countries through the national coordination and focus of vocational education as a means of positioning countries to be economically effective in an increasingly globalised and competitive economic environment.

Developing the Capacity to Secure Employment and Resist Unemployment

In both Europe and North America, a key imperative shaping the form and purposes of vocational education has been to support citizens' employment. Along with the need for a supply of occupational skills, the establishment of vocational education systems in many European countries was prompted by a desire to avoid having unemployed individuals who were both a burden on others and could stray into inappropriate and undesirable activities to the detriment of the community and the nation. Even in mediaeval Britain where responsibility for the poor resided within each community, there was a sensitivity about and responses enacted to avoid people becoming unemployed and becoming a burden on the community (Epstein, 1998). There were efforts of different kinds to provide orphans who were prone to being so diverted with opportunities to secure employment. However, it was within the emerging social democracies such as Germany where the threat arising from unemployed young people hastened the establishment of a vocational education system that sought to secure young people's participation in work and civil society (Gonon, 2009b). In France, similar issues arose, but one of the first models of vocational education was to provide a form of education for children and orphans of members of the *Grande Armie*. This provision sought to develop occupational skills as well as sentiments and capacities associated with industrious engagement in work and working life (Trogon, 2002). Similarly, in the United States, the end of the First World War and large numbers of unemployed young men returning from Europe hastened the establishment of a vocational education system. Because it was deemed that American industry lacked the maturity to sustain an apprenticeship system (Gonon, 2009a), a more institutionally based approach was required that led to the development of what is now referred to as community colleges. Here, the concern was for a vocational education that had an emphasis on occupations, but was strongly shaped by more general educational concerns. It is noteworthy that these kinds of societal responses shift and vary over time according to needs and particular societal concerns. For instance, after the Second World War, in Australia, there was a scheme developed to provide vocational education to returning soldiers (Dymock & Billett, 2010). The rationale here was that many of these soldiers had been in service since they were very young adults, had not completed any initial occupational preparation and their transition back into Australian civil society needed to be carefully

managed to avoid chronic unemployment and disaffection. Interestingly, this and an early initiative associated with developing the skills required for the war effort in Australia stand as the first examples of when the states and territories came together to work with the Commonwealth government in nationally based and nationwide vocational education initiatives. Until these important threats to national security and survival, vocational education had been far more state based, and not nationally coordinated (Dymock & Billett, 2010).

Moreover, periodic crises in levels of youth unemployment have led to an emphasis on vocational education meeting employers' requirements in attempts to increase the acceptability of its graduates to employers. Particular examples here include the provision of group apprenticeship schemes in which the government established companies who would employ apprentices and then lease them out on short-term loans to companies and individual tradespersons as and when they require an apprentice. In addition, these companies provided basic skills training and familiarity with trade tools. However, whilst these kinds of companies to a small degree reduce the level of youth unemployment, they may also assist in undermining employer commitment to apprenticeship training, on the one hand, and position apprentices as contract labour that would be leased out when a tradesperson or company needed additional labour, on the other hand. Hence, there is a series of considerations about how, in responding to imperatives associated with levels of youth unemployment, the adequacy of the vocational education provision becomes distorted because the imperative is more about employment than worthwhile occupational preparation. Therefore, in reinforcing links between societal continuity in the previous section, the concern about societal continuity has been clearly expressed in efforts in many countries to have the national coordination and focus of vocational education as a means of positioning countries to be economically effective in an increasingly globalised and competitive economic environment.

However, beyond the initial education and employment of young people there is also another, and perhaps the largest of these societal purposes: employability – the continuing development of occupational skills and capacities across working lives. As requirements for work constantly change, the availability of employment transforms and the particular needs of workplaces need to be addressed across working life, there is also a need for vocational education to play a role in sustaining the employment and employability of workers. Few would now claim that an initial preparation is adequate for a lifetime of work within a particular occupation. Instead, it is necessary for even a worker engaging in the same occupation across their working life to have opportunities for ongoing development to maintain their occupational competence. Moreover, it is likely that within a working life, individuals will have to engage in a range of occupations and need support for developing the capacities required for moving from one occupation to another, one kind of workplace to another or even within the same workplace that requires quite different types of work performance. This concern is one which is current and perhaps growing in many countries as populations age and the length of working life increases. However, many vocational education systems are premised on entry-level or initial preparation for particular occupations. The kinds of educational provisions

required by those seeking continuing education may not coincide with vocational education systems that are preoccupied and focused on initial entry-level training. Hence, the scope of the purposes associated with employment and employability is not restricted to young people's transition into work and working life. Instead, there is actually a larger and longer lasting project associated with maintaining employability across working life.

It is in these ways that vocational education has purposes associated with societal continuity and transition. It is worth noting that such purposes have had an increased emphasis following the formation of modern nation states and their need for social cohesion and continuity, as ordered through the state. That is, as with other forms of state-organised education, there are particular roles assigned to vocational education in meeting state political, economic and social objectives

Individual Fitness and Work Readiness

Securing individuals' fitness for particular occupations and developing their readiness to work stand as key purposes or goals for vocational education. Indeed, aligning individuals' capacities and preparing them to be ready to engage in their preferred occupation is a key purpose of vocational education. These goals are held to comprise (i) identifying and guiding individuals towards careers in which they are interested and which they are suited to, (ii) developing individuals' capacities to engage in their selected occupation, (iii) understanding and meeting their needs and readiness, (iv) providing authentic experiences of work to engage with and understand the occupation in the world of work and (v) engaging reluctant learners.

Beyond the institutional facts that comprise work, occupations and provisions of programmes and experiences for learners, vocational education is fundamentally premised on individuals' need to and interest in engaging in work and study, what they already know, what they assent to as being their vocation, how they engage with experiences provided for them to develop their occupational capacities and otherwise use their capacities. That is, these personal facts are what constitute the experiencing of and engagement in both occupations and vocational education. Therefore, it is important to account for individual needs and goals in consideration of the purposes of vocational education. Dewey (1916) identifies a clear educational purpose in relation to students' occupational aspirations.

> An occupation is the only thing that balances the distinctive capacity of an individual with his [sic] social services. To find out what one is fitted to do and to secure an opportunity to do it is the key to happiness. Nothing is more tragic than failure to discover one's true business in life or to find that one has drifted or been forced by circumstances into an uncongenial calling. (Dewey, 1916, p. 308)

He (1916) proposes that there are both personal and social consequences to the misalignment between individuals and their true business in life. He uses the example of a slave to illustrate how this form of labour is ultimately wasteful. There

is not sufficient stimulus to best direct the energies of slaves. Moreover, as slaves were confined to particular activities, their potential contribution to the community remained unrealised. He also declares that individuals are unlikely to find their purposes fulfilling when their occupations are looked upon with contempt. Therefore, perceptions of the value of particular vocations can have both personal and societal consequences. Indeed, trying to secure a fit between an individual and the kind of occupation they select and what may become their vocation constitutes an important educational goal at a personal level. Meeting this need has been a priority within general education as well as through career education. The focus on career education during the 1970s in America attempted to use vocational education to reform general education, which was perceived as not preparing many young people for higher education or the workplace. A key goal here was that:

> . . . all educational experiences, curriculum instruction, and counselling should be geared to preparing each individual for a life of economic independence, personal fulfilment, and an appreciation for the dignity of work. (Marland in Spring & Syrmas, 2002, p. 154)

Moreover, such a consideration is central to the project of vocational education. For instance, the idea that individuals are to be respected because they have an inherent dignity is egalitarian and democratic; that is, all individuals are worthy of respect, not because of a special talent or characteristic that they possess, but purely and simply because they possess human characteristics. Lukes' (1973, cited in Quicke, 1999) account of individualism, comprising four basic interlinked ideas: respect for human dignity, autonomy, privacy and self-development, stands as the essential elements of liberty and equality. In contrast to views expressed in Hellenic Greece, this notion is central to the democratic values of modern societies and extends to the ability to be self-determined in ways that express an individual's autonomy.

> Persons are said to be free when their actions are self-determined rather than the results of the decisions and choices of others. Freedom also involves being in a position where one is not interfered with being put upon by others; but one has sufficient personal space of privacy to carry out one's own projects without disruption. (Lukes, 1973, p. 125)

The emphases here reflect the concern most notably advanced by Dewey (1916) that an initial purpose of vocational education is to assist individuals identify the occupation to which they are suited. In this process, there needs to be considerations of individuals' capacities to participate in both education and society more broadly, and how that participation might be enhanced through appropriate educational provisions. Dewey's second purpose for vocational education is to assist individuals develop the capacities required to realise and practise their preferred occupation, that is, individuals being provided with experiences through which they will develop the capacities to perform their preferred occupation effectively. These capacities likely comprise the conceptual (i.e. knowing about), procedural (i.e. knowing how) and dispositional (i.e. knowing for) forms of knowledge needed to practise. These forms of knowledge are constituted as the canonical concepts, procedures and dispositions of the occupation and particular variations of those forms of knowledge required for effective performance in a particular work or practice setting. This suggests identifying not only the educational goals to be achieved but also the means by which

those goals can be realised by particular learners. In Rousseau's (Boyd, 1956) novel, Emile had to know the mechanical principles underlying the crafts. Yet, Rousseau was insistent that

> . . . education consisted more in practice than in precepts. He also saw a connection between education of the hand and education of the mind, pointing out that employment in a workshop aided development of the mind. (1956, pp. 85–90)

Here, it is claimed that in addition to promoting the importance of these forms of knowledge, and going beyond *techne* or just 'know how', these kinds of knowledge are learnt through practice. This development includes the generation of what is referred to as occupational virtues (i.e. the kinds of dispositional qualities that are central to the effective and ethical conduct of perhaps most if not all forms of work) (Winch, 2002). Indeed, Oakeshott (1962) makes this very point in his conception of technical knowledge (i.e. the application of rules to specific activities) and it is distinguished from practical knowledge, which has been acquired through participation alongside an experienced practitioner. While it is important to delineate and identify the kinds of knowledge that are required to be learnt so that informed decisions can be made about individuals' selection of occupations, the issue of learner readiness needs to be addressed. Readiness comprises the learner's ability to engage with experiences and learn from them what they need to know or do.

In developmental psychological terms, readiness is sometimes seen as possessing the physiological maturity to move on to the next stage of development. However, here readiness is seen as individuals having the capacities to engage in and secure fruitful learning from experiences that are provided for them. As discussed in Chapter 5, the experience of George Birkbeck was that although he sought to develop the very knowledge which Rousseau refers to (i.e. the knowledge which underpins performance) many of his students were unable to engage effectively with the experiences because their basic education and understanding was so limited. That is, they were not in a position to participate effectively in these learning experiences: they lacked readiness. Consequently, in considering the kinds of knowledge that is important to be learnt by individuals so that they can make informed decisions about both (i) the occupations they wish to select and (ii) whether they are well suited to the particular requirements of the work, issues of readiness come to the fore. For instance, some of the decision-making that young people make about their proposed occupations is based on limited understanding of those occupations, but might also relate to their emerging identity as a male or female. Hence, for instance, large numbers of young women elect to become hairdressers, dental assistants and nurses because this occupation fits with their emerging identity as a young woman. Yet, they may know little about those occupations and the degree by which working in those occupations will meet their needs and suit their capacities. Hence, readiness is more than just individuals' capacities per se; it also includes the basis upon which they make decisions and are indeed ready to make such decisions. So, it is necessary to consider the kind of experiences that can provide individuals with the ability to make informed decisions about occupations, as well as developing their capacities to be effective in those occupations.

Individual Progression

A key concern for any form of education is how it assists individuals' progress across their lives achieving both their and their communities' goals and also securing their development. Many of the purposes of vocational education discussed above are associated with societal goals and continuity. As well, there are concerns about individuals' preparedness and readiness to participate in society-generated activities such as occupations, and educational programmes associated with their ongoing development. It is now timely to consider the purposes of vocational education as they are associated with individual progression. This includes consideration of what might constitute that progression and its worth, and how it might be supported by vocational education. As has been suggested across this elaboration of vocational education, it is not possible or desirable to wholly separate out the needs of individuals from the imperatives of the social world, because the two are inextricably linked: they are both interdependent and relational. However, in this section, individuals and individual progression are the central focus of these discussions.

Quicke (1999) differentiates moral-philosophic and political-philosophic perspectives. He does so to provide a view that acknowledges the interdependency between the personal and social, rather than positioning them as being opposites or dualisms. In the moral-philosophic position, human beings are seen as capable of making moral choices, and in the political-philosophic position, ideas such as liberty, equality, justice and democracy are the central concern of and comprise an assumed theory of society, and the role of education within it. Halliday (2004), for instance, proposes that vocational education has the potential to secure distributive justice. This is because it develops capacities associated with paid work through which individual prosperity and national economic growth can be enhanced. However, he notes that the return on individuals' investment in time and money in educational courses is not equally distributed, with lower level qualifications either failing to or only minimally providing such a return. So, it is relational. Yet, the task of individual progression needs to be understood from perspectives that acknowledge both personal and social factors and contributions. Rather than being in opposition to each other, social and personal factors are held to be interdependent; both are important and necessary to each other. The latter, if not grounded in a framework of moral and political values, will be directionless and incoherent; and the former without the latter will be abstract and in danger of being seen as utopian and thus unconnected to concrete social circumstances, suggests Quicke (1999). Therefore, he adopts a view of the moral-political perspective centred on a kind of individualism premised upon political ideals of equality and liberty. As noted elsewhere, this account of individualism comprises four basic ideas: (i) respect for human dignity, (ii) autonomy, (iii) privacy and (iv) self-development as being interlinked and standing as the essential elements of liberty and equality:

> For instance, the idea that human beings should be respected because they have an inherent dignity is egalitarian since it asserts that persons are worthy of respect not because of the special talent or characteristic that may possess, but purely and simply because they possess human characteristics. (Lukes, 1973, p. 125)

In a similar way, Rehm (1990) suggests that just because individuals live in a career-orientated and technological society, this cannot suppress their personal quest for higher principles and long-term directions. Beyond rebutting what is proposed in earlier accounts, such precepts suggest that all humans, regardless of class or circumstance, should be afforded the means by which they can realise their full potential. Consequently, the idea that wholly different kinds of educational provisions and opportunities should be distributed on the basis of class or classifications of occupations is rejected in this view. Indeed, such constraints are seen as interfering with the democratic processes for all individuals to realise their personal potential. This lack of interference is a central concept for notions of individualism as founded in equality and liberty. In such a view, individuals are free in so far as they are able to realise their potentialities and have control over the processes of this occurring: self-determined.

> Persons are said to be free when their actions are self-determined rather the result of the decisions and choices of others. Freedom also involves being in a position where one is not interfered with by being put upon by others; but one has sufficient personal space or privacy to carry out one's own projects without disruption. (Rehm, 1990, pp. 2–3)

Such ideas go to the broader concept of democracy as a way of life and as the base for individuals to realise their potentialities through active participation in the life of their society (Halliday, 2004). Quicke (1999) suggests that learners in a democratic learning society are constituted as individuals who either have or potentially have the capacity to make moral choices, act autonomously and think rationally, and that their learning is about the development of persons as unique individuals for them to be active participants in the democratic learning communities. He suggests that the more autonomous individuals are, the more they are able to use their knowledge to create and achieve self-originated goals and this will play a greater role in the development of their own capacities for the development of learning communities to which they are committed. In emphasising the role of the autonomous individual, Quicke invokes a salient pedagogic principle for vocational education by drawing on Macmurray's (1961) consideration of relations between persons. This is centred on assisting learners to become self-directed, motivated and monitoring:

> . . . my care for you is only moral if it includes the intention to reserve your freedom as an agent, which is your independence of me. Even if you wish to be dependent on me, it is my business, for your sake, to prevent it. (Macmurray, 1961, p. 190)

So, what is suggested here is that the very processes of achieving individual progress are in part about developing individuals' capacities to avoid dependence on others, including those who teach. He also suggests a pedagogic practice here, through consideration of reflexivity, the process whereby individuals, groups and organisations 'turn round' upon themselves, critically examine their rationales and values and, if necessary, deliberately reorder or reinvent their identities and structures. However, to realise these kinds of outcomes, there is a need for provisions of support and for individuals to be supported in developing the capacity to make moral choices, act autonomously and think rationally – and learning is about the development of persons as unique individuals from being active participants in the democratic learning

communities. In *Democracy and Education*, Dewey (1916) proposes that democracy is more than a form of government; it is primarily a mode of associated living: of conjoint communicative living. Ultimately, he claims, within such a view, objectivity was intersubjectivity, and nothing develops intersubjectivity understanding better than does democracy.

Indeed, as has been emphasised repeatedly in earlier chapters through a consideration of vocations and also the need for occupations to be enacted by individuals who take them as their vocations, a key purpose for vocational education is individual progression. That is, assisting individuals progress from schooling and childhood, through to adulthood and the selection of and engagement in occupations that are congenial for them, including the forms of paid work in which they engage. These are held as being central to democracy in the broader sense of its use. As Carr and Hartnett (1996) suggest,

> . . . democratic society is thus an educative society whose citizens enjoy equal opportunities for self-development, self-fulfilment and self-determination. (p. 41)

Importantly, they suggest that educational provisions should be able to assist in realising this ideal. Three kinds of good associated with democratic purposes are proposed to arise from educational activities according to Chapman and Aspin (1997). Firstly, education is seen to improve individuals' ability to rationally choose among a range of competing perspectives on the basis of presumed expansion of their cognitive and practical capability. Secondly, educational activities are seen to enable greater social cohesion and participation in a democracy. Thirdly, education is seen to enable individual prosperity and national economic growth enhancing the ability to perform paid work. There is a strong emphasis on self-fulfilment and securing of vocations within these proposed goods.

However, the progression towards such a sentiment is not always so straightforward. Some individuals are able to readily identify an occupation to which they are attracted and suited, can go about securing both opportunities to learn about and engage in that occupation and then progress through that occupation until it becomes their vocation. However, for many others, there is uncertainty about and discontinuity in these steps. Moreover, sometimes the development of both the interest in and capacities to engage in an occupation arise in ways that were not anticipated by individuals, yet can come to form their vocations. For instance, as noted in Chapter 3 on vocations, aged care workers came to identify with and take as their vocation aged care work. However, this development occurred in ways that arose through engaging in convenient employment, not out of an initial desire to undertake that kind of work. Similarly, Chan (2009) refers to apprentices who became and identified as bakers. Yet for the majority of these apprentices, baking was not their intended occupation. Rather, again, circumstances provided opportunities for them to engage in bakery work and a bakery apprenticeship and through participating in particular bakeries, they came to identify firstly with those bakeries and then with the occupation of baking. So, whilst individual progression is perhaps the key purpose of vocational education, it may occur in ways that are not always systematic, planned and or even intended by those whose progression is the focus of vocational education. Moreover,

as Sianesi (2003) notes the realisation of some of the kinds of purposes to which Chapman and Aspin (1997) refer are far from straightforward or premised upon vocational education provisions alone. The possibilities for participating in society and the financial benefits that comprise a return on personal investment in education are quite uneven and often distributed asymmetrically to individuals' talents and capacities. It seems that higher-level qualifications more readily realise such benefits than lower-level vocational qualifications. Yet, access to qualifications is not always premised upon equity and democratic considerations.

So, through the discussions earlier, it seems that there are at least four distinct purposes for vocational education to support individuals' progression across their life histories and in support of the ontogenies. These are (i) supporting development for and across working life, (ii) assisting work transitions, (iii) assisting the development of learners whose needs and capacities transform and (iv) securing personal emancipation and progression. Each of these purposes is now briefly discussed.

Supporting Development for and Across Working Life

Supporting individuals' development across working life is a fundamental goal for vocational education. Here, consideration is given to the purposes associated with developing the capacities to initially engage in a paid occupation and then to continue to develop those capacities across working life. The knowledge needed to be learnt for occupations has arisen over time, and in response to particular societal needs that themselves transform. Because these needs are generated and exist at a societal level there is usually a common set of expectations and practices associated with particular occupations, and these are what need to be learnt by those who wish to practise these occupations. Moreover, as Winch (2004b) suggests, it is in the interests of individuals, as employees, to develop capacities that can be used within an occupation, not just a particular job. This, he adds, is also likely to be the source of greater satisfaction with work and bolster their employability. Therefore, a worthwhile educational focus appears to be on developing work capacities at the occupational level. One way of considering this knowledge is to see it as being canonical for that occupation, that is, the knowledge that is expected to be possessed and demonstrated by anybody who practises the particular occupation. This knowledge will include the concepts that are associated with the occupation and these range from simple factual information to the richly associated body of conceptual knowledge which is the characteristic of what is referred to as being deep knowledge. Then, there are the procedures that are required to effectively practise an occupation, both in their specific and more strategic form which are likely to be required. There are also the dispositional qualities that need to be generated, such as the values, sentiments and dispositions that are central to perhaps all forms of work (Winch, 2002) but take particular forms in specific work settings. So, for example, an aged care worker might be expected to have a set of understandings about the ageing process. However, they are also required to understand how this process is manifested differently across the population, the distinct kinds and forms of clinical care required, as well as the diverse forms of personal support and care which

elderly people might require. In addition, they would need the dispositions associated with caring appropriately, including respect for elderly people, discretion in dealing with them and guarding their interest in appropriate ways. In addition, there is likely to be a range of more strategic requirements associated with understanding the limits in the domain of their roles and also at what times other forms of assistance will be required or should be avoided. Indeed, it is these very canonical forms of knowledge that are often the focus of the development of occupational standards and curriculum within vocational education. Attempts to capture what constitutes the canonical knowledge of the occupation (i.e. what all practitioners need to know and demonstrate) are often purposes for educational provisions.

Yet, as already mentioned beyond the canonical level of practice, there are requirements associated with the circumstances in which the occupation is actually practised, because these requirements are shaped by the practices of those communities (Gherardi, 2009). These purposes are important because although requiring canonical occupational knowledge, it is the ability to participate in, be effective and advance practice in particular settings that is central to the effective conduct of practice by workers. It is also likely to be pertinent to their sense of self as effective practitioners. This is because it is in the actual circumstances in which individuals practise their occupation where they apply their knowledge, receive feedback and judgements about their performance and secure satisfaction associated with their work performance. Hence, an important educational purpose is to assist students understand and capture something of this diversity that constitutes the occupational field into which they are entering. There are effective models which have done this in the past, such as novice nurses having working experiences in a range of different kinds of hospital wards. However, these kinds of experiences need to be identified, considered and enacted.

The need for ongoing development across individuals' working lives is also important for their civil and work-related purposes. As noted above, as work practice requirements change, new demands emerge, new technology becomes available and new and different types of work tasks emerge, there is a need for a provision of ongoing development across working life to sustain an individual's employability. However, the purposes and form of this kind of vocational education may well be quite distinct from that for initial occupational preparation because it is of a different kind, possibly scale and also form (i.e. not for individuals identifying as full-time students). So, it is necessary to identify purposes for and means by which these students can come to participate in vocational education provisions which work to continue to develop their capacities. Lakes (1994) proposes two kinds of empowerment that can assist in developing these capacities: (i) functional and (ii) critical empowerment. Functional empowerment helps individuals learn the technical or applied aspects of the job in order to execute the tasks and duties of their respective or future employment. Lakes (1994) claims that vocational education is very good at providing the former, in the form of a practical, applied study of occupational science and technology through vocational education systems and universities. Critical empowerment is that which assists learners in shaping a cultural politics of work, so that by acting together, workers may achieve some measure of personal dignity

as well as social responsibility for functioning in democratic workplaces and participatory citizenship. However, he claims that this kind of empowerment is largely ignored by mainstream vocational education, is subordinated within the teaching and is subservient to the functional, rationalised results of efforts to secure efficiency and measurable accounts of moral and ethical educational ends. He makes reference to the Deweyian concept of vocational education needing to be directed towards the goal of creating 'courageous intelligence' of learners and preparing them for a more equitable and enlightened social order (Dewey, 1916, p. 319). This point is well made. The societal interest in and press to secure the effective development of occupational capacities can come at the cost of other related educational goals associated with work and work life. Lakes (1994) refers to these matters often being subordinated by teachers. However, apart from teachers, it is likely that those who organise and select the content for courses may well be ill-disposed towards such educational purposes. Indeed, in many ways, these are the exact antithesis of the broader purposes which vocational education was developed to support, securing individuals harmonious participation in society.

Yet, curiously, there may be another set of barriers towards achieving what Lakes (1994) and Dewey (1916) promote: the ability to engage with students about such matters. Students will not always be receptive to these kind of critiques, and where they occur, they seem most likely to arise from their own experiences of the workplace and work (Bailey, Hughes, & Moore, 2004; Billett & Ovens, 2007). Such purposes may well need to be enacted through experiences in which students have actually had to confront such issues in the workplace. Hence, it is likely that an educational provision seeking to secure critical empowerment may well need to include means by which to engage students in the worth of these kinds of educational purposes. In these ways, supporting developing the capacities for and across working life needs to include the learning of the occupational-specific capacities and more general work life competences required to sustain employability, and also develop further the capacities of individuals to make informed and critical decisions about the choices with which they are faced with in and around their working lives. A central one of these is the transitions associated with work and occupations.

Assisting Work Transitions

Vocational education necessarily has to consider issues associated with transitions as a central concern. Part of individuals' developmental pathway across their working lives comprises the transitions to occupations and/or forms and ways of working which are new to them and, consequently, the transitions to new circumstances and requirements for performance that can also be new. These transitions can either be of a significant kind, when individuals need or want to move to a new occupation, or of a lesser scale, merely when engaging in their current occupation, but in different circumstances. Although it is sometimes suggested that individuals will need to change their occupation between five and ten times across working life, this claim likely requires nuancing. Certainly, for those faced with wholesale changes to their occupations (such as has occurred in the printing industry or when an industry moves offshore) there is a need for the development of an entirely new set of

occupational capacities. However, for others, perhaps the majority of work transitions are of a different kind. This can be movement across related forms of work within their occupation or ones associated with it. Their needs are for assistance in bridging to those different forms of work requirements. Many individuals commencing working life in a particular occupation will come to practise that occupation in a range of different ways. For instance, my experiences in clothing manufacturing extended across employment focused on the production of women's suits, men's outer wear, theatre costumes and the mass manufacturing of casual and leisurewear. All these forms of employment required applying my occupational knowledge in quite distinct ways.

Then, there are individuals whose transformations are between two different kinds of work set within the field of their existing expertise. Here examples include individuals who moved from a technical or trade role into a supervision or into the teaching of those technical occupation or trades. In both of these examples, the activities still relate to the same occupational field, but there is a need to develop the capacities to effectively supervise, manage or teach other people. The point here is that individuals may require educational support when making both kinds of transitions during the course of their working life. It is likely that these requirements will be far greater when the transition largely comprises learning new domains of knowledge (e.g. when moving from one occupation to another) or which requires developing a whole new set of capacities such as management or teaching. These kinds of transitions also may well constitute significant challenges to individuals' identity and sense of self (Smith & Billett, 2006). Shifting from a form of work with which individuals are familiar and, perhaps, in which they are respected for their competence can be personally confronting and challenging.

So, considerations associated with such transitions will need to go beyond the development of occupational knowledge in both its canonical and situational forms and need to extend to issues of a sense of worth and dignity which individuals' experience. For instance, in a long career working with experienced and skilled practitioners as they moved to become vocational educators, a common and enduring pattern of concerns emerged. This transition process required them to complete a university degree in teaching. However, many of these individuals although highly competent with their occupational capacities were not practised or ready for the requirements of higher education, and for the preparation and writing of assignments upon which their performance was judged. This could lead to statements of defiance, attempts to ridicule others and engagement in superficial ways. Many of these responses appeared to arise from concerns about self and how individuals might be exposed. The important point here is that, again, vocational education cannot simply be about technical knowledge albeit for an occupation or for strategies such as preparing and writing assignments. It also needs to encompass purposes associated with understanding and responding to individuals and finding ways in which they can learn the capacities required to become a practitioner that they intend.

Consequently, more than initial preparation and professional development or continuing education, vocational education has purposes associated with assisting individuals move from being competent in one form of work to another, and from one occupation to another.

Assisting the Development of Learners Whose Needs and Capacities Transform

The third element of assisting individual progression is the important purpose of an educational provision that continues beyond any initial preparation. Returning briefly to Dewey's first purpose – to assist individuals identify to what vocation they are suited – it is the case that this fit with an occupation can change over time. That is, what might seem appropriate and of interest to a young person forming their identity as a young man or young woman may change over time as other factors and experiences occur. For instance, many young women decide to take apprenticeships in hairdressing or become nurses. Sometimes this circumstance is because that decision-making occurs at that point in their life when they are forming their sense of self as a young woman that these occupations appear to be well aligned to a gendered identity, and with very limited experience of this kind of work. However, later they realise that this is not the work they are suited to, nor does it fulfil their needs for a particular kind of gendered identity. Hence, initial occupational decisions and trajectories based on an earlier fit may well need to be revisited and changed. Here, the concerns include avoiding a second uncongenial trajectory as this has a range of personal and economic consequences for the individual, but also for those who assist their development.

Then, there is the brute fact that individuals' capacities also change over time through maturation and, as such, they are not always able to continue on with their preferred employment. It is well understood that sportsmen and sportswomen, front-line emergency and military staff have relatively short careers and will need to find alternatives as their physical capacities can no longer sustain these kinds of roles. This same issue also extends to other intense work roles such as cooks in restaurant kitchens and those working in high-attrition industries such as marketing and advertising, not to mention those which are physically demanding such as in the construction sector (Dymock, Billett, Martin, & Johnson, 2009). In some occupations, these factors are understood and accommodated. There are alternative pathways or careers in some emergency service and military roles, which take them away from front-line duties and may comprise more age-appropriate forms of work. However, not all forms of work have these kinds of contingency arrangements. Here, individuals may need to engage in educational provisions that can support them either in moving to a new occupation or in transferring across to work that is related to what they know and can do. Then, there are many workers who are affected by the physical injuries or just plain wear and tear on their bodies through their work and need to secure alternative occupations. As above, it is most likely that those who are seeking wholly new occupations and are perhaps moving from highly engaged forms of work (e.g. combat, emergency, high-end advertising) may well also experience a loss of self-confidence in their ability to engage in other forms of work or sense of self. For instance, in one study it was found that for miners whose work had changed radically with the use of robotic mining devices which remove the necessity for much of the underground work found the adjustment to being a surface-based worker was quite difficult (Abrahamsson, 2006). They often continued to wear their

mining safety gear even though this was not required in this form of mining. That is, these workers identified with the practices and work of being an underground miner which included the clothing and associated artefacts.

The point here is that to identify a fit between their interests and capacities and what might become their vocation is not restricted to what occurs in the transition to adulthood or the initial preparation for an occupation. It can also occur within and across adulthood as work changes and individuals' capacities and interests also transform. Hence, vocational education provisions may need to identify their preferred occupation and be prepared to be effective within that occupation. These educational purposes may need to be exercised for these individuals, but in ways that meet their needs, requirements and interests.

Personal Emancipation and Progression

Central to the expectation of social justice to be realised through education is the capacity to secure personal emancipation and progression. This expectation is as applicable to vocational education as any other educational sector. Elias proposes that

> . . . far from being exploitative, vocational education needs to meet the needs of individuals to earn a living in society with the talents and capabilities they possess. (1995, p. 185)

In particular, providing individuals with the kinds of capacities through which they can extend themselves perhaps beyond the constraints of the circumstances into which they were born, and also unsatisfactory or unsuccessful experiences in compulsory education, is a clear social justice goal for vocational education. Indeed, as has been rehearsed throughout this book, all education can be seen as being vocational, because it should always be about assisting individuals realise their full potential, and this includes overcoming disadvantage and unnecessary barriers to their personal progress. Just as other educational sectors have purposes associated with individual emancipation and progress, so too does vocational education. Moreover, this should not be seen as being a nicety, but rather a fundamental tenet of this or any of the educational sector. For instance, as Quicke (1999) notes democracy is not something restricted to the ability to vote, but is a far broader concept associated with a way of life through which individuals can realise their potentialities through active participation in the life of their society. That can only happen when individuals have the kind of capacities that will allow them to engage and participate in ways which reflect their interests and knowledge. Moreover, Quicke (1999) rehearses here a key point made in the earlier chapter on occupations as vocations (Chapter 3): that occupations and the provision of education for them have long been determined by 'others' rather than those who practise.

> Persons are also free to the extent to which they can realise their potentialities and have control over the process which enables this to happen. (1999, pp. 2–3)

In this way, and through quite distinct pathways, vocational education has purposes associated with securing personal emancipation and progression. These propositions

likely to take quite different forms for individuals, from developing students' insights about what is possible for them, advising them on how to achieve their goals and developing their capacities to realise their goals are all quite central elements of vocational education. It is perhaps noteworthy that in countries such as Australia whose population is premised on immigration from other countries, that education has been the vehicle through which members of immigrant groups have been able to secure access to esteemed forms of employment such as law or medicine and come to play key roles in society.

Through this elaboration of the five sets of key purposes for vocational education, it can be seen that these purposes are multidimensional, complex and overlapping in particular but different combinations for individuals, communities and society which may each have quite distinct purposes. Consequently, it becomes apparent that proposed often-used distinctions between general (i.e. liberal) and vocational education are not easily made, nor are propositions that vocational education is nothing more than technicist, narrow and concrete and restricts the outcomes for those who participate in it. Instead, it is proposed that the purposes of vocational education are central to the development of individuals across their adult life course, the communities in which they live, the places where they are employed and also the country they inhabit. Such elaboration opens up the prospects for and expectations of vocational education to be enacted in different ways according to particular personal and institutional imperatives. However, the way that these purposes are taken up is something that needs to be guided and intentional.

Purposes of Vocational Education

In summary, there is clearly no singular purpose for vocational education as is sometimes proposed. Instead, there is a set of purposes that are in some ways quite distinct yet often overlap in complex ways in particular programmes to address either societal or personal expectations. These purposes can also reflect particular orientations or values. That is, for instance, whether they should emphasise economic or socially transformative outcomes. In all, from the discussions above, the purposes of vocational education can be seen as being associated with

- cultural continuity, in the form of sustaining and developing further occupational capacities;
- sustaining economic efficiency and effectiveness, in the circumstances where the occupation is practised;
- sustaining societal (i.e. national) continuity and change;
- personal construction, that is directed towards individuals' occupations and vocations, thereby securing personal needs;
- securing occupational needs, both through both initial preparation and ongoing development across working lives; and
- securing purposes that are useful to the community and/or country.

Clearly, within these diverse set of purposes there are quite distinct orientations that go beyond addressing either personal or societal needs and goals. Throughout, the account here emphasises these contributions are central to the conception of developing occupational capacities that might well become individuals' vocations. Consequently, in considering what might be the purposes and goals for vocational education, it is important to account for the sources of those vocational needs and requirements, their situational manifestation and transformation over time. Importantly, therefore, there is no single clear set of purposes for vocational education. Instead, these are seen as something that stands as an end to be achieved for a diverse range of cultural, societal, community and personal needs, and within each nation state will change as it confronts particular issues. All of these purposes and the factors that generate and shape them are quite central to considerations of curriculum for vocational education. That is, these purposes shape the nature of what is intended to be achieved to the provision of vocational education, how teachers and others implement it and how and for what purposes individuals engage with it.

Chapter 7
Curriculum and Vocational Education

It does not take a major conceptual leap to appreciate the fact that when work education is grounded on the attempt to regulate, its educational value is lost.
(Kincheloe, 1995, p. 28)

Vocational Education and Curriculum

As has been proposed across this manuscript, there are social and personal dimensions to considerations of vocations, occupations and what constitutes vocational education. Therefore, an explanation of what constitutes vocational education curriculum necessarily needs to be sympathetic to and account for these two dimensions. Indeed, as has been proposed and defined in Chapter 3, vocations are personally constructed, enacted and assented to, albeit constrained by the possibilities afforded by the social world. Conversely, occupations largely have their genesis and transformations within culture, society and institutions. All of this implies that decisions about what constitutes vocational education and how it might best proceed need to be understood from societal, situational and personal levels. Moreover, both the personal vocation and the societal occupation are interdependent: each relying on the other to greater or lesser degree. Therefore, decision-making within societal, situational and personal domains shapes and is shaped by what transpires in relations between these two sets of factors. Consequently, an educational provision that seeks to realise individuals' vocations and also the continuity and transformation of occupations is subject to societal, socially situated and personal imperatives, and decision-making about those imperatives in ways that are both interdependent and relational. This consequence means that, as well as considering social and personal factors, it is necessary to consider them as a complex rather than as separate sets of factors.

The previous chapter set out a range of purposes to which vocational education should be directed. Similarly, these purposes reflect particular sets of ideals about and focuses for decision-making and these occur at societal, situational and personal levels. Taking these ideas forward, this chapter aims to outline perspectives of what constitutes curriculum for vocational education. Firstly, it discusses diverse concepts

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of curriculum and their appropriateness to vocational education. As a means of progressing the discussion of curriculum for vocational education, the chapter considers three dimensions: the intended curriculum (i.e. what sponsors and others intend how it should progress and what it should achieve), the enacted curriculum (i.e. factors that shape how the curriculum is enacted and experiences provided for learners) and the experienced curriculum (i.e. how learners engage with what is intended and enacted and learn from it) as a way of capturing the bases of and points of decision-making which shape not only what is intended, but also what is enacted as well as experienced.

As well as offering categories through which to consider and appraise curriculum provisions for vocational education (i.e. intended, enacted and experienced), the discussion in this chapter attempts to distinguish the particular kinds of decision-making that constitute these dimensions of curriculum. As in previous chapters, the discussion acknowledges that considerations of what constitutes worthwhile occupations and the educational provisions that support them have typically been advanced by powerful and societally privileged others, rather than those who practise or are informed about the particular practice. These others have also shaped the public discourse at a societal level about vocational education. This pattern of representation appears to be the product of not only the privileging of particular occupations but views about the capacities of those who practise occupations being able to articulate their particular qualities and how they should be learnt. In particular, since the provision of vocational education has become of interest to nation states, as exercised through government agencies, these influences have been strong in directing plans for and the means through which vocational education is to be enacted.

It follows then, that when considering definitions of curriculum, curriculum intents and models for developing curriculum, the influence and decision-making of these others is usually powerfully evident in contrast to those who actually practise and teach. This influence is strongly reflected in the kinds of documents that are generated to direct or guide the provision of education (i.e. syllabus, statements of outcomes and education achievement). Yet, decision-making also occurs when individual teachers or trainers decide to implement the provision of experiences for learners, and when individual learners make decisions about how they will engage with what has been afforded them. That is, they decide how they engage with these arrangements, for what purpose and with what degree of effort. So, in considering the totality of curriculum it is important to understand that beyond what others intend is how these intents are enacted and shaped by the decisions made by those who implement them. This enactment is also shaped by the particular circumstances, resources and moments in time that constrain their implementation. Then, ultimately, what is implemented is experienced by learners who make decisions about what and how they engage with the experiences provided for them, and how experiencing this translates into what they construct and learn. Aristotle, according to Morrison (2001), would view this as the exercise of power (or politics) at three different levels, even when it is a less-conscious act. It is the exercise of accepted norms and practices, situational imperatives and personal needs. Consequently, none

of these three levels of decision-making can be seen as a mere footnote, but rather are essential decision-making that occurs in vocational education.

Following a consideration of definitions of curriculum, the second section sets out to discuss three concepts of curriculum that are helpful for understanding the process of organising, implementing and realising the curriculum. These comprise the intended, enacted and experienced curriculum, and reflect the decision-making that arises in each of these three levels of engagement.

Conceptions of Curriculum

There is a range of ways that the term curriculum is used within the educational literature and also in the public discourse about education. Therefore, as a starting point, it seems both helpful and necessary to discuss what is meant here by curriculum. This discussion is required for three distinct reasons. Firstly, the term curriculum is used widely and its meaning is advanced in quite different ways. This is often because each usage and meaning is embedded within a set of beliefs and ideologies (Smith & Lovatt, 1990) that shape how discussions about curriculum proceed. Hence, there is a need to understand and consider what particular meaning is being given to the term when it is being used here, and why this particular meaning has been chosen. Secondly, these usages often comprise short-hand forms for the position or viewpoints of those who use them (Skilbeck, 1984). This concern becomes quite salient given a term like 'curriculum' permeates not only the educational discourse but also the public discourse, and with powerful effects because of the assumptions that sit within these discourses. Therefore, being aware of and placing the discussion here within a specific set of conceptual precepts seems essential, particularly given the role that those outside of vocational education practice play in vocational education. Moreover, because many of those who use the term curriculum in the field of vocational education do so from particular understandings, it is important to compare the intent behind those concepts from studies of curriculum with those being used about curriculum in the public discourse. Thirdly, different usage and meaning of the word also suggest a number of issues that are central to the nature of curriculum itself as these terms likely have different emphases given the particular account of curriculum being discussed. These issues include the goals for, purposes, focus and conceptions of curriculum.

Each of these rationales for discussing curriculum can be applied to any field of education. However, they have particular meaning within vocational education. Perhaps more than any other education sector, views, discussions and decision-making about vocational education are engaged with by a broad, but often influential audience but in quite different ways across different nation states. This is not to say that vocational education is in some way wholly distinct from other sectors. Certainly, parents and governments are concerned about what occurs in compulsory education (i.e. schooling) and this is also subject to considerable public discussion and discourse. Furthermore, governments are becoming increasingly interested in and prone to interventions within higher education at the institutional level.

Nevertheless, vocational education appears to be an educational sector that is more directly subject to the whims and fluctuations of governments, than others, possibly because it is closely linked to economic activity, including employment. Moreover, because vocational education often engages with particular fields of practice (i.e. occupations), those who speak on behalf of those fields of practice (i.e. professional bodies, trade unions, industry associations and employers associations), those who are employed in them (i.e. practitioners), those who employ and those seeking to advance the interests of particular sectors of the economy often have an interest in and the capacity to exercise views about the purposes, enactment and outcomes of vocational education. Further, because of its often highly applied focus, the outcomes of vocational education are subject to monitoring, comparisons and judgements in ways that are often quite explicit. The employer selecting amongst potential employees, the supervisor in the workplace who makes judgements about the educational preparation of those whom he/she supervises all make judgements about the readiness of recent graduates to contribute productively to the workplace. Moreover, when there are unacceptable levels of youth unemployment or shortage of skilled workers, judgements are made about how vocational education does, should or will address these problems, sometimes by those who remain uninformed about the processes of education. Something of the diversity of the demands made of vocational education are set out in the previous chapter on its purposes. However, perhaps more than in any other field of education, because of its broad engagement with agencies, spokespersons and government departments who sit outside the field of education, clear concepts are required to clarify what constitutes curriculum, how it should be considered and enacted in ways which secure its intended purposes.

Definitions of Curriculum

Statements advising that there are many definitions of curriculum are almost as numerous as the definitions themselves. The plethora of such definitions appears to be the product of a relatively recent attempt by the curriculum studies discipline to establish its premises (e.g. Tyler, 1949), and an overly close association with schooling or, more precisely, compulsory education. Considerations of what constitutes curriculum seem to have become a subject worthy of detailed consideration in relatively recent times as education, and in particular schooling, has become a key concern of states. Consequently, as schooling became a subject of state goals, activities and expenditure, it became important to find ways of organising this educational provision to best meet the state's imperatives. Hence, some definitions arising from the discipline of curriculum studies initially referred to the goals of the school. That is, in the recent past and contemporary times, consideration of the term curriculum has occurred within an era of compulsory and mass education. And, given that mass education in both its compulsory and vocational education form was introduced to achieve particular societal purposes, it is not surprising that a more intense focus has been placed on education as it became a societal project. However, as the understanding of the term and what it represents has developed in this era, something of

Table 7.1 Definitions of curriculum

Author	Definition
Tyler (1949)	All the learning of students which is planned by and directed by the school to obtain its educational goals
Kearney and Cook (1960)	All the experiences a learner has under the guidance of a school
Wheeler (1967)	By curriculum we mean the planned experiences offered to the learner under the guidance of the school
Foshay and Beilin (1969)	The operational statement of the school's goals
Hirst (1974)	A programme of activities designed so that pupils will attain by learning certain specifiable ends or objectives
Eisner (1979)	The curriculum of a school or a course or a classroom can be conceived of as a series of planned events that are intended to have educational consequences for one or more of the students
Skilbeck (1984)	Curriculum refers to the learning experiences of students, insofar as they are expressed or anticipated in goals objectives, plans and designs for learning and the implementation of these plans and designs in school environments'
Print (1987)	Curriculum is defined as all the planned learning opportunities offered to learners by the educational institution and the experiences learners encounter when the curriculum is implemented. These include the experiences that the teacher has devised for the learners and are included in the form of a written document
Quicke (1999)	Curriculum provides a framework for learning. It suggests that for all the things that could be learned these particular things have the most value; and it does this with reference to the educational needs of the students to be taught and the social and political context in which teaching and learning take place

the complexity of what it seeks to capture becomes evident, as indicated in the list in Table 7.1. It becomes evident in reviewing these definitions that changes in the conception of curriculum have evolved over time. With Tyler (1949), who is seen by many as being seminal in the field of curriculum studies, and his concern to realise the goals of education institutions, 'curriculum' has evolved through the provision of particular kinds of experiences to support the achievement of those goals. Yet also, over time, there is an appreciation that beyond such goals there is a need to consider issues of implementation including teaching and, finally, those who are to be taught. Across these definitions there is a strong and abiding emphasis on the intentional organisation of learning experiences within education institutions and with teaching as the means by which that intended learning will progress.

Within each of these definitions, there is also a framework for decision-making. It is perhaps not surprising given these kinds of definitions and the emphases within them that in the public discourse, the curriculum has come to be seen as a document (i.e. a syllabus) that has been developed in written form and that is used to plan and regulate the experiences to be organised for learners, and for their learning. However, curriculum is far more than a set of intentions that are the product of one set of decisions and decision-makers. It is something that is implemented by

teachers in educational institutions and practitioners and others in settings where practice occurs. It is also something that learners encounter, make sense of and learn from and through.

All these definitions and a consideration of their characteristics and merits are useful. Beyond considering the particular emphases within these definitions, it is helpful, in reflecting upon their utility for vocational education, to step outside definitions of curriculum such as those above which appear to be more applicable within a discourse on schooling. Not the least reason for doing this is because much of vocational education takes place in settings other than educational institutions. An evolution of definitions whose focus is on the compulsory education of children may not be wholly helpful for considering curriculum provisions for the non-compulsory educational provisions. Indeed, the meaning of the term curriculum is found in Latin word *currere*, which refers to run, to hasten, to fly, but also to run through or traverse. It is also used as a neuter noun meaning course or lap. But it can also mean running or race – 'the track to be run' – the course of learning (Marsh & Willis, 1995) and even 'the course of life'.

The Scope of Curriculum for Vocational Education

There is considerable scope to what constitutes the scope of the conception of curriculum for vocational education. The genesis and original usage of the term refers to a pathway along which individuals need to progress which may not be constrained to experiences in educational institutions. This definition is, in many ways, quite helpful because it suggests that the curriculum is generated in the social world that proposes particular pathways upon which individuals must progress and that these are likely to be established by social norms and forms. Thus, progression along them will be shaped by societal factors. Therefore, the conception of and imperatives for curriculum are both social and personal, albeit relationally and interdependently so. This usage also acknowledges that individuals will progress in distinct ways and at different paces, because they have particular capacities; hence, the need for such courses and the rules surrounding them. Of course, the definition referring to a 'course of life' presents curriculum more as a personal concept comprising individuals' journeys, as is the reference 'to run'. However, germane to the discussion about decision-making is who sets out the track and for what purposes and how do individuals elect to move along it and for what purposes.

Accounts of intentional learning processes outside of educational institutions are quite analogous to these conceptions of curriculum. In anthropological accounts, learning through participation in occupational practices is found to occur across diverse circumstances in non-schooled societies (Jordan, 1989; Rogoff & Lave, 1984). In these circumstances, the course of learning is not presented as a progression through a set of subjects by the learner. Instead, there is a sequence of tasks to be successfully learnt and practised on a pathway of performing increasingly more complex and demanding tasks that are central to the continuity and survival of the community (Pelissier, 1991). Moreover, this pathway, whilst founded in particular

situational forms and norms, requires the engagement of learners for the knowledge to be learnt and the practices, and possibly the communities, to be sustained. So, a sequencing of the activities that learners progress along is premised on securing the continuity of the social institution in which they are practised and through which participants learn. These accounts referred to two imperatives in the process of learning. The first is to address a need for novices to develop the kinds of skills that the enterprise requires to function effectively to survive and prosper and, the second is to develop these skills in ways that do not jeopardise the workplace or communities' survival. Although not stated in the form of a syllabus, these pathways as curriculum have specific purposes (i.e. intents). They function in similar ways to what is often located in a syllabus: setting out the activities, goals to be achieved and means by which progress and attainment can be secured. Often, the novices' learning progressed on the bases of their agency, as little or no direct instruction occurred, only a pedagogy based on their engagement in practice. The guilds of mediaeval Europe also provide models that are highly consonant with this conception of curriculum. These institutions oversaw not only the standards required for somebody to be recognised as a craft worker, but also established stages for not only the development of new craft workers but the articulation of experienced workers. This pathway progressed from journeymen to craftsperson, and then to becoming a full member of the guild. This membership would then allow them the authority to train future craftsmen (Greinhart, 2005). The process of training future craftsmen occurred within the masters' businesses and households. The master assumed parental authority over the young man upon his becoming an apprentice, and his training was exercised through the authority of the master in his household. This development progressed on the basis of a direct instructional relationship between the master and the apprentice. It included learning not only technical knowledge about the occupation but also about how craft workers should conduct themselves and go about their practice. Within these kinds of communities, the guilds served as a mediating institution. To become accepted as a full member of the guild and, presumably, to sustain that status meant not only being an effective craftsperson (Greinhart, 2005) but also conducting oneself and one's apprentices in a way which was deemed proper by the guilds. Yet in these anthropological accounts, much of the progression is based on how individuals decide to engage in these tasks, and then progress along that pathway.

For instance, Lave (1990) found that apprentices learnt the craft of tailoring through participating in workplace activities that were sequenced to provide engagement in tasks of increasing accountability and complexity, but in ways that were highly pedagogic. This pathway of participation – *currere* – incrementally provided access to learning the capacities required for this occupation. The apprentices' initial activities were structured to provide access to the overall goals for that work and then develop the performance requirements of particular tasks. Initially, they finished off and ironed completed garments, which provided opportunities to understand the standard of finish demanded for garments and the shape of garment components. These activities presented the apprentices with observable and explicit goals for their performance. Following this, the apprentices learnt specific

procedures for constructing garments (e.g. sewing garment seams, waistbands and hems), albeit through observation and imitation, not direct teaching. The pathway of learning experiences was structured by engagement in tasks of increasing risk should mistakes be made. This comprised the apprentices initially engaging in tasks where mistakes could be tolerated (e.g. making children's and undergarments) to those where mistakes have significant consequences (e.g. ceremonial garments) in terms of cost and the quality of finished items. The requirements for performance and indirect guidance through observation were made accessible and learnable through the apprentices' participation in everyday work activities as they progressed along the *currere*. In this way, the workplace's norms and practices provided a curriculum pathway through structuring the apprentices' activities, thereby shaping their learning through experiences that were intentionally structured by pedagogical purposes. This included providing initial access to the goals that the apprentices would have to achieve, opportunities for engaging in tasks where mistakes could be tolerated, opportunities for practice to develop and hone skills and then progressively engaging in more demanding activities. However, progression and learning were premised on the active engagement by the apprentices. So, more than decisions about the pathway and its provision are also decisions by learners about the ways in which they engaged and progressed in these tasks.

Perhaps surprisingly, an example and variation of this same kind of curriculum can be found in preparation for the prestigious occupations of medicine and architecture in Ancient Greece (Clarke, 1971). It is reported that although medicine, unlike most other occupations, enjoyed a preparation within an educational institution, much of the learning occurred in family and between father and son.

> They acquired their knowledge of medicine by observing and being with masters: empirically, and not according to the way of learning natural to freeman, who have learnt scientifically the arts which they impart scientifically to their pupils. They are empirical physicians, who practise medicine without science. (Laws – 720ab, 875d condensed – as cited in Lodge, 1947, p. 42)

It also seems that children from outside the family were sometimes accepted as medical students, albeit for a fee. After a general education, the students entered professional studies as young as age 14. According to accounts from this time, these pupils would begin by getting to know the surgery and making themselves useful within it (Clarke, 1971). The pupils would then participate in observations and shadow the physician as he went about his work. This might include pupils being left with patients to ensure the physician's orders were conducted, and monitor the patient's progress. As with mediaeval models and what Lave (1990) reports above, these pupils lived with the doctor and adopted a filial relationship with him. They would also receive formal instruction with writings at the time referring to instruction including oral teaching and precepts (i.e. direct instruction). In complaints, about the shortage of practice-based opportunities reminiscent of the contemporary era, there is also the suggestion that because this family-based practice of medical training was unable to provide the range of experiences required for an effective education, it was necessary to introduce anatomy classes because without adequate

practical experience this knowledge was not being learnt. Indeed, it seems that there is evidence here of the textbook arising as a method of teaching partially related to the demise of the family-based medical training. Similarly, it seems that architecture was also learnt in-family. Moreover, like medicine there is an acknowledgement of the need for a general education before a pupil could commence architecture. This model of participation reflected very much an apprenticeship approach with at least one reference in ancient Greece to the desired age of commencement being 18 years. Again like medicine, there was an acknowledgement of the need for the development of both 'academic' and practical capacities (Clarke, 1971). Also, what was evident in these examples is an early instance of what has become the highly vaunted model of contemporary apprentices (i.e. dual system) in which the apprentice is exposed to experiences in both the educational and practice setting. Further, evident here are efforts to make links between the contributions in both settings. What emerges from these accounts and is referred to in other developments is that only at times when it was found that the adult master or father could not pass on all the important skills required by society was it necessary to have an educational institution (Thompson, 1973). Hence, the educational institution was there to augment the experiences from practice settings and these activities became elements that could be best enacted in dedicated educational settings.

The worth of these conceptions of curriculum supporting novices' learning is that they illuminate particular pathways and are based upon the use of knowledge and learning that were socially prominent at that time, and have remained so until today. They also reflect much of what is advanced in reasonably contemporary literature that provides explanatory accounts of learning domains of knowledge which have applicability to practice. Both the cognitive (or individual) (Anderson, 1993; Shuell, 1990) and socio-cultural (e.g. Rogoff, 1995) constructivist psychological perspectives explicitly link engagement in goal-directed activities with individuals' learning, whilst the latter emphasises the inter-psychological processes – those between individuals and social sources that occur through engagement in socially shaped activities and with support from social partners, such as might occur in workplaces. Similarly, engagement in everyday workplace activities is held to reinforce, refine or extend individuals' knowledge (Gauvain, 1993; Rogoff & Lave, 1984). Lave (1993) concludes that whenever you examine practice you identify learning, making the link between engaging in social practices, such as work, and the structuring of learning. The cognitive view also suggests that the novelty or routineness of the work activities for individuals shapes opportunities for new learning, and refining and honing what has been learnt previously (Anderson, 1982; Van Lehn, 1998). Therefore, more than an end in itself, engagement in work activities incites change in individuals' capacities: learning. This learning is assisted by support and guidance when engaging in new tasks and their refinement (Collins, Brown, & Newman, 1989). The ordering of experiences and engaging learners in tasks in workplace settings are often analogous to pedagogic practices within educational settings. Instructional schemes such as cognitive apprenticeships (Collins et al., 1989), reciprocal teaching (Palinscar & Brown, 1984) and the half-worked problems that are used to reduce cognitive load (Renkle, 2002) are also comparable to such processes.

Moreover, the focus on learning rather than teaching has been widely adopted in models of instruction premised on constructivist principles (Vosniadou, Ioannides, Dimitrakopoulou, & Papademetriou, 2002). Discovery and peer-learning processes (Fischer, Bruhn, Gräsel, & Mandl, 2002) in school settings are all highly analogous to the kinds of curriculum and pedagogical practices identified in anthropological accounts of the intentional organisation of learning by communities (Pelissier, 1991), and can be categorised under the motif of participation.

In other work and more contemporary settings, similar curriculum pathways of learning and their pedagogic properties have been identified. In hairdressing salons, the tasks apprentices engage in and their progress through these tasks are regulated by the salon's approach to hairdressing (Billett, 2001b). In one salon, where clients are attended to by a number of hairdressers, the apprentices first engage in 'tea and tidy', providing hot beverages for clients and keeping the salon clean and tidy. These tasks are necessary components in understanding and performing as a hairdresser. Through these activities, apprentices learn about and practice procedures for determining client needs, hygiene and maintaining cleanliness. For instance, identifying clients' needs and providing them with tea or coffee assist in building the apprentices' capacities and confidence to negotiate with clients. Next, apprentices engage in washing clients' hair and later rinsing the chemicals used to shape and/or colour hair. Engagement in these tasks develops further the apprentices' capacities to communicate and negotiate with clients. Throughout, the apprentices learn inter-psychologically through direct interpersonal interactions with experienced hairdressers and more indirect kinds of participation (i.e. observation and listening) to understand and practise salient aspects of each task (e.g. the importance of removing all the chemicals from clients' hair), and each task's place in, and significance to, the hairdressing process. Later, apprentices work with experienced hairdressers in placing rods and curlers in clients' hair. Then, before being permitted to cut women's hair, they commence cutting men's hair. This is held to be less difficult and of lower accountability (i.e. lower error cost) than cutting women's hair. The apprentices continue on this path of activities and engagement in practice until they can style hair independently. So there were tracks in these salons providing incrementally more demanding tasks (i.e. new learning), and then practice (i.e. refinement) in the tasks to assist in the development of the apprentices' workplace practice. This track of activities constitutes a central principle of a workplace curriculum (Billett, 2006), and one founded on maintaining the workplace's viability. However, it is noteworthy that there was a different *currere* in each of these workplaces thereby reflecting the particular requirements of each setting. It was also found that although the hairdressing activities in the salons provide particular kinds of tasks, there were overall preferred approaches to undertaking haircuts that the hairdressers used their preferences in making decisions about how they progressed with particular clients' treatments (Billett, 2003). That is, the hairdressing apprentices and also the hairdressers exercised discretion in their approach to their hairdressings tasks. So, although the apprentices in each of these settings may well have learnt the canonical requirements of the hairdressing occupation, they also learnt the specific requirements of that workplace through engaging in practice.

Moreover, they did so in ways that include the exercise of their discretion about how they would proceed, premised on their preferences, prior experiences and judgements about clients. Hence, an essential dimension of this account of curriculum is the decisions made by the learners about how they construe the task, construct a knowledge space around which to progress the task and select particular approaches to undertake the task.

Conceptualising Curriculum for Vocational Education

Important for the discussion, a broader perspective of curriculum is required for vocational education than one that is associated with achieving the intended outcomes of an educational institution. This is not only because much of what constitutes the curriculum includes experiences outside of education institutions, but also to understand and articulate clearly what constitutes the dimensions of curriculum for vocational education. For instance, even where highly organised and uniform curriculum intents are available, students will have a range of different experiences and will progress in different ways. Consider the range of experiences and attributes that different types of vocational education students may bring to their encounters with a nationally endorsed occupational programme or course. Presumably, it will be experienced quite differently across the cohort of students who engage with it. For instance, apprentices in many countries spend the majority of their 3- or 4-year indenture in the workplace. Far from being a uniform practice, what occurs in workplaces even those enacting the same occupational practice can be highly diverse, because of situational factors such as the kinds of work being undertaken, the kinds and composition of staff, the degree by which the work is the same or differs across instances of its enactment. A distinction often made is that between apprentices working in large workplaces where the tasks might be highly specialised compared with small workplaces where the work tasks might be far more diverse. So, it is quite likely that although engaged in the same programme of study, the students will have quite distinct kinds of experiences and from them learn quite distinct forms of knowledge. However, other vocational education students may spend little or none of their time in their course engaged in tasks in the workplace, and their experiences are wholly based in the educational institution. Consider also how differences in the currency of these students' experiences and previous success in educational programmes might influence how they engage in this educational provision. Therefore, it seems that the *currere* – the course to be run – will not be the same for all learners, no matter what is intended to occur.

So, what is intended is exactly that: only intentions. Despite being the product of careful planning by systems, educational institutions and teachers, what happens when the learning experiences are implemented is not pre-specifiable, predictable or even manageable. That is, there are likely to be differences between what was intended and what resulted as a product of implementation. Things do not turn out exactly as planned (Smith & Lovatt, 1990). This is because the experiences are neither uniform nor, for many, wholly as intended. For instance, there are likely to

be distinct differences in terms of access to experiences; the actual experiences at those institutions; the quality of outcomes from interactions with teachers and others, the values and orientation of those teachers and the degree by which these values and approaches are shared with students; and finally the students' interpretation of what they experience. None of these key factors can be pre-specified or managed to the degree that will guarantee a uniform experience for all students. Also, these considerations emphasise that beyond what is intended, what is enacted by teachers and others, in educational institutions or outside them is ultimately something experienced by the learner: the experienced curriculum. Consequently, rather than definitions of curriculum focusing on achieving the goals of the sponsors or the institutions that provide these experiences, it is essential to include consideration of students experiences. Yet, rarely in the public or governmental discourse is such a consideration engaged with, except when learners are urged to commit to and engage enthusiastically in what is provided for them. Hence, in global efforts to promote an economic focus within lifelong learning it is often suggested that it is important for adults to initiate and be personally active about their work life learning (Organisation of Economic and Cultural Development (OECD), 1996). However, rarely are these kinds of provisions supported by sentiments which emphasise the need to understand what is important for adults' lifelong learning and how this can best be provided for them. So, a public or governmental discourse which views curriculum only in terms of intents, and usually as a document (i.e. syllabus), is not sufficient.

Indeed, the syllabus is usually nothing more nor less than a list of content areas which are to be assessed – sometimes extended to include a number of objectives and learning activities. It stands as just one element or dimension of curriculum. Although the public discourse tends to view curriculum and syllabus as being synonymous and even in educational systems the places that prepare these documents are sometimes referred to as the curriculum development unit or something similar, there are four key distinctions that limit the role of syllabus to being a dimension of element of curriculum (Brady, 1995).

Firstly, an association between curriculum and syllabus is often based on subjects. However, not all learning is based on discrete subjects (e.g. primary, preschool education and problem-based education). For instance, during my teaching in fashion studies within the Australian vocational education system we used to organise the students activities on the basis of a series of garments. That is, pattern making, garment construction, design and textile courses were organised around the production of a series of garments. This commenced with the students making a simple skirt. To do this, in the pattern-making classes they learnt all about making patterns for skirts, how measurements were taken for skirts and concepts such as 'stride room'. The garment assembly classes focused on techniques for making skirts; the textile classes focused on the kind of textiles that could be used for making skirts; and design classes focused on designing skirts. From this basic skirt, the students progressed through making a series of garments of increasing complexity and then ultimately garments of our own design and choosing. The point here is that all of the activities and subject were focused on a series of artefacts: garments, not subjects.

Secondly, associating curriculum with syllabus ignores the hidden curriculum – all of those experiences not explicitly stated in syllabus that arise through the enactment of experiences and the learners' construction of what they experience. There is much that occurs through education provisions which is unintentional in terms of either the processes or outcomes. This includes the consequences of societal factors (e.g. most fashion students being women or gay men) and assumptions made by educators and administrators (e.g. fashion students do not really need proper industrial equipment, unlike trade students, because it is just sewing). Thirdly, an association with syllabus also denies the notion of effective curriculum – the attributes of teachers, learning environment and learning experiences. Often, one of the features of vocational education provisions is that the person teaching the course is highly skilled in the area in which they are teaching. Hence, they bring significant contributions to the learning process that cannot be encompassed nor accommodated within a syllabus document. Fourthly, ultimately, curriculum is something experienced by the student. Yet, students do not experience a document. Instead, they experience what is enacted: the kinds of experiences that are provided for them.

So, clearly there is more to the concept of curriculum than it being something intended and being manifested as a document. This consideration of distinct conceptions of curriculum then leads to a need for more expanded set of conceptions than those focused on either a document or an educational institution. These conceptions have been advanced in different ways and categories by curriculum theorists. For instance, Glatthorn (1987) classifies different conceptions of curriculum, as follows:

- Ideal curriculum – that proposed by scholars as appropriate to meet particular needs
- Entitlement curriculum – societal views of what should be taught
- Intended or written curriculum – what is to be taught usually stated in the form of a syllabus document
- Available curriculum – that which can be taught through the resource of schools
- Implemented curriculum – what is actually taught by teachers
- Achieved curriculum – what students learn as a result of what has been implemented
- Attained curriculum – measurement of student learning

Similarly, Print (1993, pp. 5–7) offers an equally diverse set of curriculum concepts, comprising

- Curriculum as subject matter – a body of content to be taught
- Curriculum as experience – a set of experiences students encounter in educational contexts
- Curriculum as intention – what it is intended students should learn from the curriculum
- Curriculum as cultural reproduction – as reflecting and reproducing the culture of society
- Curriculum as *'currere'* – 'running the race', the process of providing continuous personal meaning for individuals

These different conceptions and characterisations of curriculum suggest quite different bases for planning, organising and evaluating curriculum. Glatthorn's (1987) list includes expectations (e.g. ideals, entitlement and intentions) as well as elements of curriculum (e.g. what is taught and what is learnt). Print's (1993) list includes elements of curriculum (e.g. content and experiences) as well as goals (e.g. cultural reproduction and intentions). Also, from the above, it is clear that how different individuals might experience the curriculum (i.e. 'the course to run') is premised on their previous experience with education, the circumstances in which that experience occurs (e.g. workplace or school room). These experiences are unlikely to be uniform or to have the same legacies. There are also intentions that might be derived from curriculum planning, and this planning might occur very far away from and without an appreciation of the diverse circumstances in which it will be implemented. Alternatively, the planning might be undertaken by teachers or teams of teachers in particular vocational education institutions, and will be premised upon their experiences, understandings and, perhaps, sets of quite specific localised requirements. Moreover, there is also the need to consider what happens as a result of implementation, and how this might progress in different ways because of similar sets of local factors, and also teachers' involvement in the development of what is to be taught and why. Certainly, as is discussed below, there is little certainty whether what is developed centrally in the form of a syllabus will be engaged with by those who have to implement it with similar levels of enthusiasm and commitment as those of its proposers or a similar understanding about what was intended. There are also likely to be inevitable differences in the capacities to implement what has been proposed either locally or centrally.

So, all of this indicates that it is insufficient to premise a concept of curriculum as something that has been developed either centrally or locally and is manifested in the form of a document: a syllabus. The point is, you cannot touch or see a curriculum. This is because curriculum also comprises the experiences that are provided for students. There is an established adage which goes 'give 1000 teachers the same lesson plan and 1000 different lessons will occur'. Therefore, considerations of curriculum extend to how and what is implemented: the enactment of the curriculum. Moreover, there is a need to include consideration of what students make of what they experience: how they construe what they experience, construct knowledge from it and engage with it and what they learn from it. That is, how they experience what is enacted. Each of these dimensions or elements is delineated by the decision-making that they constitute. That is, the decisions about what should be the aims and goals for and means by which the curriculum is proposed to proceed, including bases for assessment and evaluation. Then, there are the decisions of those who enact or implement based on how they elect to utilise the resources and opportunities available to them and then, finally, there is the decision-making by those who engage as learners.

Consequently, curriculum can be seen as having qualities associated with intentions, implementation and as experiences. So there is what is intended or planned (i.e. *the intended curriculum* – syllabus, goals for learning and outcomes, what teachers plan), what happens when the curriculum is implemented (i.e. *the enacted*

Table 7.2 Conceptions of curriculum as intended, implemented and experienced

	Glatthorn's (1987) categories	Print (1993)
'Intended' curriculum	Ideal curriculum Entitled curriculum Intended curriculum	Intentions – intended reproductions
'Enacted' curriculum	Available curriculum Implemented curriculum Effective curriculum	Subject matter Reproductions – unintended
'Experienced' curriculum	Achieved curriculum Attained curriculum Hidden curriculum	Experiences *Currere*

curriculum) and also what learners experience as a result of its implementation (i.e. *the experienced curriculum*). In Table 7.2, the conceptions of curriculum as proposed by Glatthorn (1987) and Print (1993) are drawn together in a framework which is based upon these three dimensions of what constitutes curriculum.

Together, these three components of curriculum offer a basis for understanding and illuminating what constitutes a comprehensive account of curriculum for vocational education. Moreover, they provide a means to understand the different sets of concerns. For example, the concerns of government and their industry partners often focus on intents or outcomes (e.g. occupational standards), and may be different from those who have to implement or enact the curriculum (e.g. teachers and trainers). Also, the quality of experiences that lead to desired outcomes is the concern of those who participate in the vocational education programmes and their sponsors, and, of course, those who participate in them as learners. These three dimensions of decision-making about curriculum are now briefly overviewed.

Intended Curriculum

The intended curriculum is exactly that: what is intended by its sponsors or developers and should happen as a result of the curriculum being implemented. Curriculum is rendered real and tangible by planning processes that often lead to the production of a document (i.e. syllabus) that states the educational aims and goals (and often objectives) to be realised, what should be taught and how it should be taught and also assessed and to what standard. These intents can include the overall goals set by those who construct the syllabus, the aims for the individual units (i.e. courses or modules) and, often, detailed statements of educational intents (objectives) that guide instruction and assessment. These elements are usually presented in the syllabus document. It is often the intent of the sponsors that these programmes are implemented with great fidelity. Given the growing, and, in some instances, intense, interest by national governments to use vocational education to realise important economic goals, the intended curriculum in the form of detailed syllabi and associated administrative processes have become a key concern for their agencies. As

elaborated below, this process often also involves engaging with representatives from industry to formulate these standards and the intended curriculum that guides its enactment. To this end, a number of regulatory measures have been used globally for vocational education (e.g. national industry competency standards and accreditation procedures). Such measures have been developed in attempts to try to ensure a uniform implementation of national curricula. The centrally determined documentation has been used to achieve fidelity to what was intended by vocational educators who will implement them. In some countries, such as Australia, these arrangements have extended to endorsement of national syllabus documents, accreditation arrangements for providers of vocational education, the opening up of the provision of vocational education to those who are able to provide what government wants, particular requirements for those who teach in nationally endorsed qualifications and even legislation about the use of terms such as certificate, diploma and associate diploma when used on educational credentials. That is, these terms can only be used as proper nouns (e.g. certificate, diploma and associate diploma) when they adhere to required kinds of provisions, standards and personnel requirements. Many of these initiatives were introduced as part of the Australian reform of vocational education process in the 1990s and were essentially about gaining control of the 'intended curriculum': its aims, goals, objectives and content. A key concern of government was seemingly to wrest control of the intended curriculum from the vocational education systems and teachers, and give this control to industry through advisory bodies in order to secure greater responsiveness to industry needs (Skilbeck et al., 1994). There was also the belief that by doing this, what would be enacted and learnt would be faithful to what government and its industry partners wanted. In other words, there was a quite naïve belief that control of the intended curriculum would also grant control of what was implemented and experienced by students. In these ways, governments and their associated agencies placed enormous emphases on managing the learning experiences and outcomes for vocational education students through attempts to specify and mandate their experiences and outcomes through the intended curriculum. The obvious limitation of the strategy is that curriculum is also something that is enacted and experienced, and not just intended.

The concept of the 'intended curriculum' also includes what experiences teachers plan for their students. This is particularly true when those who teach are in a position to shape or even determine the curriculum intents and content. The school-based curriculum development model (e.g. Skilbeck, 1984) affords such discretion to teachers. In some countries, and in some kinds of vocational education provisions, localised arrangements such as these are still being practised. Curiously, they are most likely to be enacted in circumstances in which governments and others do not take a particular interest, because they do not believe them to be important enough. For instance, when I began my teaching career in vocational education, my teaching load comprised day classes with full-time students who were engaged in a certificate-level vocational preparation programme. This programme was organised, justified and structured largely by public servants working in a government department and followed the advice of some industry representatives. My discretion

in my teaching this course was constrained by the content and outcomes that were stipulated in the syllabus. Yet, in the evening, I also taught a recreational course which focused on industry-specific processes. However, in this course, I designed and developed a programme, made my own decisions about what should be taught and what should be the outcomes of this programme. Yet, this experience was an exception, because from then on all the programmes in which I taught had syllabuses that were shaped by others and, progressively, had increased specified components for what should be taught and how it should be assessed. In the future, if a movement away from highly regulated national processes comes into play, perhaps because of a requirement to more effectively meet local needs, then it is likely that those who teach will be requested to develop both programmes and learning experiences which meet these needs. That is, whilst teachers make many decisions about the enacted curriculum, there is also the premise for teachers to contribute to the intended curriculum, beyond merely organising a semester's programme of educational experiences for their students.

Enacted Curriculum

The enacted vocational education curriculum comprises what is actually implemented. What is enacted is shaped by the resources available, the experience and expertise of the teachers and trainers, their interpretation of what was intended, their values and the range of situational factors that determine students' experiences. Beyond the capacities of teachers and resources available in the educational institution, which shape the activities available to be undertaken in those settings, there are also a range of factors that shape the enacted curriculum. These factors include the kinds of workplaces or practice settings that are available to students within the location of the programme, where these students can find support and guidance, and access to particular kinds of experiences. For instance, there may be quite different opportunities available in metropolitan, regional and remote communities that shape the kind of experiences that students can have and come to know about in each of these settings. The 'enacted curriculum' also includes part of the 'hidden curriculum' – that which was not directly intended by teachers, but happened nonetheless. It is important to understand the factors that shape the 'enacted curriculum', as there are more probably than not going to be differences between what was intended and what is implemented. These differences are perhaps most likely to be greatest when the intended curriculum is developed remote from and without interaction with the teachers who will enact what is intended by sponsors and others (Billett, 1995). So, for example, industry and governmental representatives may agree on what is required for their purposes, and capture this in curriculum documentation. Yet, if this process is undertaken without consulting or interacting with those who are supposed to implement what others have agreed upon, what is enacted may be quite different from what is intended. Of course, there is a long-standing and legitimate role for others to shape what should be taught.

Nonetheless, if intentions are to be realised there will have to be at least some engagement with those who will enact the curriculum. If for no other reason, making clear what is intended and how the statements of intent should best be interpreted and managed at the local level is required. Moreover, many of those who teach in vocational education are employed on the basis of their occupational expertise. Hence, they have understandings, capacities and values associated with the occupational practice which those who organise the intended curriculum (i.e. the syllabus) may lack. As referred to above, there have been attempts to control the 'enacted curriculum' within vocational education by use of the regulatory measures and procedures that aim to ensure that the intents are enacted with fidelity. However, even the most strenuous attempts for uniformity and fidelity with implementation are unlikely to be successful (Print, 1993). Enacting experiences for students is both supported and constrained by factors including (i) teachers' expertise and experience, and sympathy with what is intended, (ii) students' capacities, readiness and interest, (iii) available resources to provide experiences and resources to support the students' experiences and (iv) availability of and the kind of support from the community, including the kinds of support provided by workplaces planning processes. In this way, what is enacted in terms of experiences for learners is as much, and perhaps far more, premised upon the available resources, teachers' capacities and beliefs and expertise, as well as student characteristics, than what is stated in a document. These local factors will likely shape the degree by which what was intended is likely to be realised. Teachers' decisions about the particular approaches to select and enact as they implement the curriculum are fundamental here. That is, the decision-making about what shapes and constitutes the enacted curriculum is conducted by those who put into practice the learning experiences they have selected for their students.

Therefore, in terms of student learning, beyond what is enacted, the most important conception of curriculum is perhaps what students experience and learn from what is intended and enacted.

Experienced Curriculum

The experienced curriculum is what students experience when they engage with what is enacted, regardless of whether this is what was planned and intended. This, for some, is the only plausible definition of curriculum (Smith & Lovatt, 1990). That is, if student learning is the most salient concern for educational provisions, ultimately the only thing that is really important is the experienced curriculum: what and how students construe and construct from what is enacted. Such a view, as well as emphasising the democratic essence of education, is also supported within the broad countenance of constructivist views. Put simply, individuals are active meaning makers not merely the unquestioning recipients of stimuli from elsewhere, as behaviourists used to argue. Quite early, Dewey (1916) proposed that curriculum is grounded in the activity and interrelationships of persons. This is a view of the curriculum as an interaction between the learner and the world, with experiences

as the interplay of activity, being acted upon, reflected upon and experienced. That is, curriculum is what the individual encounters when they engage in activities and interactions that have been planned for them. For instance, what was intended as a group learning experience might result in a group encounter characterised by the domination of just a few. For some students, this experience will be all about the manifestation of power in a group situation and the frustration of those whose ideas were marginalised. Others might have learnt about how to organise and advance their ideas.

In a similar way, consider the differences in learning experiences enjoyed by students engaging full time in educational institutions versus apprentices who spend the majority of their time in workplaces. Unlike the apprentices, the college-bound students may never have experienced the kinds of workplaces in which they are expected to utilise the knowledge they are learning through their courses. Nor will they have the opportunity to learn vocational skills through engaging in authentic workplace activities. Certainly, these learners will encounter in their quite different pathways of vocational skill development (i.e. one based in the college, the other largely in the workplace). However, and far more fundamentally, these learners may come to construct these experiences quite differently, because their particular sets of experiences present them with very different bases for engaging in and learning from their vocational education.

Assumptions that individuals simply accept suggestions from the social world have been refuted by a range of disciplines. Instead, it seems that individuals construe meaning and construct knowledge on bases which arise from the kinds of experiences and learning that have occurred in the past. This is referred to by Valsiner and van der Veer (2000) as their cognitive experience. Others have suggested analogous concepts to explain the process of human meaning making. Also, accounts from philosophy (e.g. Lum, 2003), cultural psychology (Valsiner, 2000), socio-cultural theory (Wertsch, 1993) and sociology (Giddens, 1984) all propose in reasonably consonant ways that the process of individuals' engagement with suggestions of the social world is one very much premised upon what they know, their bases for knowing and their previous experiences. Hence, there can be no confidence that what is planned or enacted will indeed be that which is learnt. For instance, even the pedagogic strategies used in vocational education might generate quite different engagements and outcomes (Posner, 1982). Consider the self-paced and independent learning opportunities that vocational students may encounter. These experiences may meet the needs of some, but not all, learners. For some students, these experiences provide an opportunity to excel; for others who are less ready, these demands go beyond what they can achieve without assistance (Billett et al., 1999). Hence, outcomes of learning are likely to be a product of what and how students experience what has been implemented. Elements of the 'effective curriculum' reside in what students experience as well as the implementation. In all, it is students who make decisions about the ways they engage with what is provided for them in educational programmes, in causes or in other settings such as workplaces. So, the decision-making which constitutes the experienced curriculum arises from the personal preferences, experiences and capacities of those who are positioned as learners (e.g. students, apprentices and workers).

Vocational Curriculum

It can be seen from the above that the vocational education curriculum needs to be considered as encompassing sets of socially derived and personally constructed concepts that are both multidimensional and complex. Much more than achieving the goals of the school, there are dimensions associated with the expectations of curriculum as important societal intentions, localised needs and imperatives, the possibilities of what can be achieved through the implementation of sets of experiences for students and ultimately how students engage with and learn from those experiences. Within all this, there are levels of decision-making which are not necessarily easily or readily connectable. This decision-making is driven by quite different imperatives, different priorities and distinct premises. Moreover, beyond decision-making comes the importance of experience within curriculum. There is a clear intention to provide a particular kind of set experiences from which it is anticipated particular kinds of student learning will likely emanate. Then, there are the experiences of those who teach and implement experiences for students and the kind that can be accessed by students. Finally, there is the basis by which students come to experience what is implemented and learn from them.

These complex sets of factors and concepts have just been introduced here. The following chapter seeks to elaborate in far greater detail how such decision-making and experiences shape the provision of, the implementation of and the experience of vocational education.

Chapter 8
The Provision of Vocational Education

. . . a right educational use of it (vocational education) would react upon intelligence and interest so as to modify, in connection with legislation and administration, the socially obnoxious features of the present industrial and commercial order. It would turn the increasing kind of social sympathy to constructive account, instead of leaving it a somewhat blind philanthropic sentiment. It would give those who engage in industrial callings desire and ability to share in the social control, and ability to become masters of their industrial fate. It would enable them to saturate with meaning the technical and mechanical features which are so marked a feature of our machine system of production and distribution.
(Dewey, 1916, p. 320)

. . . the work we have to do in the field of adult education is the work that all forms of education should be united in performing. The main purpose of the education process is not mastering of particular disciplines or particular techniques. This is subsidiary. Its function is to make open to all the whole of our inheritance. It is to enable people to see the meanness of the city and the city itself. It must breed constructive scepticism and belief at one and the same time. It must serve the practical enactment of developing knowledge which leads to control. Education cannot rest upon particular interpretations of life or have preserved activities into which only the few can enter. Education must be for everyman and its fundamental aim must be to enable everyman to enrich the common life, to add what it is in him to add to the common stock.
(cited as seen World Association for Adult Education, 1931, p. 124)

Vocational Education: Decision-Making, Planning, Implementing and Participation

What constitutes the provision of vocational education, how it is implemented and what is learnt from and through it is fundamentally shaped by decision-making of different kinds and by individuals and institutions positioned differently within

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and outside this field of education. This decision-making includes that about the fashioning of its worth and determining its intended purposes, content, processes and outcomes. As noted in earlier chapters, the engagement of nation states with educational provisions and, in particular, vocational education has done much to see these intentions shaped by interests from outside the educational sector. As vocational education has increasingly been seen to be directly aligned with key economic goals associated with (i) the quality and quantum of skills required by society and (ii) the ability of citizens to be employed and resist unemployment, it has come to be seen as an important state-regulated function. However, the very importance of its contributions has often been translated into decisions made on its behalf and key decision-making being largely undertaken away from vocational education institutions. Although, to date, much of this interest and decision-making has been directed towards the various vocational education sectors in those countries, increasingly, provisions of occupational-specific education in higher education and also in schools have been subject to the same kind of processes of external mandate. Regardless of this interest and centralised decision-making, those who organise and implement educational programmes and experiences including administrators, teachers, workplace trainers and practitioners also make decisions that shape how the provision of vocational education is enacted. That is, these individuals make judgements and other decisions about the kinds of provisions, how they will progress under particular circumstances and what they are anticipated to achieve. Much of this decision-making occurs within the constraints of the expertise, experiences and resources available, and, of course, consideration of local factors such as student capacities and readiness. There are also perhaps the most important of decision-makers, the participants in these programmes. They decide whether they will participate; and if they do, in what ways, for what purposes and what degree of effort and intentionality will they direct towards what is enacted. Put plainly, although there is considerable and growing attention on the intended curriculum (i.e. what is supposed to progress and be achieved), there is also decision-making occurring in terms of how these processes are engaged with by learners.

To elaborate this decision-making and its implications for a consideration of vocational education, this chapter utilises the three conceptions of curriculum introduced in the previous chapter: the intended, enacted and experienced curriculum. Through a discussion of the scope of each of these concepts and a consideration of decision-making that occurs within it, the curriculum processes underpinning vocational education and explanatory accounts of the provision of vocational education are advanced. So, having considered definitions and orientations of curriculum, it is now appropriate to consider decision-making as a defining part of the curriculum process and also the provision of vocational education. These considerations are advanced through this chapter by considering in turn the intended, enacted and experienced curriculum.

Intended Curriculum: Scope and Decision-Making

The scope of and decision-making within the intended curriculum (i.e. what sponsors and designers intend to occur and achieve) is increasingly central to its intended purposes, form, content and outcomes. Therefore, it is worthwhile considering the scope of the intended curriculum and the impact of this decision-making. According to Tyler (1949), the key elements of curriculum are outcomes, content, method and evaluation. Indeed, it is these elements, or variations of them, that are used in many of the models of curriculum development. One way of elaborating what constitutes the intended curriculum and how it is manifested in different ways is to utilise these elements to contrast approaches to the intended curriculum that are (a) either highly prescribed for those who will implement them or (b) engage and involve those who are to implement them. These are used to contrast approaches that are sometimes referred to as being the ‘top-down’ and ‘bottom-up’ approaches to the organisation of curriculum. Analyses of the outcomes, content, method and evaluation included and specified within documents articulating the intended curriculum provide measures of the degree by which these intents are organised, what content is emphasised and to what degree sponsors seek to manage the curriculum process including the ways this extends to the specification of content and mode of learner assessment. Consequently, it is worth considering and contrasting the bases for, kinds and extent of decision-making occurring in these distinct approaches to understand the orientation and scope of the intended curriculum.

Such interest should not be seen per se as an unwelcome or unreasonable intrusion into the provision of education. It is important to be reminded that teachers and educational institutions are not the only group with legitimate interests in what is to be taught and how it is to be taught. Within vocational education, it is possible to identify a range of others who have an interest in the curriculum. As well as teachers or trainers and the institutions in which they work and/or teach, there are also

- government – have concerns about the focus, direction, outcomes and cost of vocational education;
- industry – have concerns about the quantum and quality of skilled workers available to service its needs;
- enterprises – both public and private sector enterprises are concerned about having access to employees who can meet their goals for products and services, and sustain their activities for the future;
- individuals – such as students and workers who commit time and energy to participating in courses and other kinds of learning experiences as they seek to realise their personal goals and ambitions;
- communities – have an interest in the kind of courses being taught and their contributions to the community and the way in which these provisions can assist sustaining that community.

Yet, as proposed throughout this book, across human history, the influence of powerful others and societally privileged voices has been profound on the standing

and perceived worth of occupations and vocational education. Their influences have come to play a particularly powerful role in the provision of vocational education, and this seems to increasingly be the case. Across that time, considerations for and decisions about preparation and ongoing development for occupations have been made by powerful others of different kinds (i.e. aristocrats, theocrats, plutocrats and bureaucrats) and much of their decision-making has been based around serving their particular interests. The legacy from the exercise of these earlier interests have included a hierarchy of occupations, premised on the degree by which they allegedly emphasise mental or manual efforts, constituted culturally desirable activities and the kinds of knowledge that are required to practise them. This decision-making has included whether many of the occupations that are now served by vocational education should indeed be subject to an educational provision; and if so, what form it should take and how it should be organised. Another legacy is that there was, and perhaps there remains, a view that not only did many of these occupations require lower levels of human capacities but also that those who engaged in them as a matter of course had restrictive capacities and a limited potential for further development. Such views clearly have a profound impact upon the objectives for, forms and kind of educational provisions that are afforded to such individuals.

Needless to say, and as elaborated in earlier chapters, these precepts and arrangements have not always served the interests of those occupations and those participating in them. Indeed, they were often intended to constrain and restrict the purview of the occupations or utilise them in ways which reflected the purposes of dominant elites. This phenomenon even extended to the activities of the guilds that were intended to advance the standing and interests of particular occupations. In more recent times, for instance since the decline of guilds and with growing concerns about the need for skilled workforces within states with modern industrialised economies, governments and corporate partners have taken an increased interest in vocational education. Much of that interest is associated with three abiding goals: firstly, to secure an adequate supply of skilled labour in occupations that are central to the national economy; secondly, to ensure that young people gain adequate skills in order to secure employment; and thirdly, to secure young people's participation in civil society, presumably in ways that sustain its current forms. An integral aspect of these goals is a process of inculcating socially desirable dispositions such as personal industry, honesty and integrity.

As noted in Chapter 6, vocational education is closely aligned to the supply of labour and the kinds of capacities that this labour possesses. There is also interest by powerful economic partners including those representing industry, employers and employees (i.e. unions or professional associations). These interests have become key 'stakeholders'. Governments across a range of countries are often keen to embrace their advice to address concerns with provisions of vocational education, and in particular specific vocational education systems. The Australian case study presented below provides an instance of this. Stakeholders' interest and influence is consistent with that across the ages that has been variously exercised by aristocrats, theocrats, bureaucrats and plutocrats. That is, powerful societally privileged voices have shaped not only the standing of work, but views about those who perform such

work and the educational provisions that best suit both the work and those who perform that work. As mentioned earlier in this book, one of the most famous of public debates about vocational education was that in 1915 between John Dewey and David Snedden about the form that vocational education should take in the United States. Dewey advocated for a form of vocational education that was general in kind but had an occupational emphasis within it. Snedden was an advocate of the doctrine of social efficiency that drew on social Darwinism. This doctrine, which was quite popular at this time, had powerful social support (Garrison, 1995), and was concerned with a very occupationally specific form of education. Snedden also believed that some individuals were incapable of engaging in anything other than the most basic of work tasks, and anything other than a very task-oriented and specific provision of job training would be wasted on them. As Commissioner of Education for Massachusetts, Snedden promoted the efficiency perspective through advocating the establishment of vocational schools to train students in specific job skills. However, more than skills alone, there was also a broader societal goal. He held that schools must produce workers who valued tradition and upheld virtues such as obedience, punctuality and deference to authority. Dewey argued that this approach made students' needs subservient to economic needs which were defined as the interests of employers (Kincheloe, 1995). However, a range of industrial interests (e.g. National Association of Manufacturers) and powerful individuals actively supported Snedden and used that influence to secure key government positions (i.e. Snedden became Commissioner of Education) to enact these views (Gordon, 1999). Moreover, the popular press was both highly supportive of the social efficiency approach and hysterical towards its opponents, such as Dewey. This is but one example that, across history, there is a strong and consistent pattern of engagement by powerful and socially privileged interests exercising their views about the nature of work and the provision of work-related education, including its purposes. Indeed, the history of vocational education is marked by the exercise of their interests in ways that are frequently either ill informed or misinformed (Billett, 2004).

More recently, in some countries, there is a growing concern about sustaining skills across working life as work requirements change and to ensure that workers remain skilled and able to contribute to the economy and are able to continue their employment across their working lives. Such imperatives are also being energised by the ageing of working populations in many countries and the lengthening of working lives. That is, workers are increasingly becoming older and working longer and, therefore, needing to remain employed and be employable (i.e. capacities to remain employed) for far longer. Hence, there is now a shift to consider continuing education and training far more widely than in the past. Yet, these kinds of considerations and the level of governmental and stakeholder interest have been exercised with greater and lesser intensity over long periods of time (White, 1985). Some suggest that the fluctuations of this interest can be found in periods of economic activity. Most noticeably, it is suggested that in times of low economic activity and high unemployment, and, particularly, youth unemployment, governments become highly interventionist (Stevenson, 1992) and see vocational education as being both a cause of and solution to these problems, albeit largely through control. There are

parallels in other forms of education. For instance, it has been noted that government interventions in schooling have always been at their highest during periods of economic and social distress. Most of these have been economic, but the oft-stated exception was the concerns within the United States when the Russians were able to launch a satellite into space before they did. This achievement suggested there was a malaise in American society that had its roots in an ineffective schooling system. With this event, and so often in response to times of economic distress, governments attempt to manage the educational provision and to emphasise language, mathematics and science and applicable outcomes. In this particular instance, the American government attempted to introduce a highly focused and behavioural approach to schooling premised on teaching to, realising and assessing against behavioural measures of human performance. This circumstance, amongst others, led to the establishment of an agency which generated banks of behavioural items which teachers were supposed to select from, implement and assess students against. Such engagement and response still exists and, as mentioned, is usually intensified during periods of national economic and social crises. Yet, in contemporary times, the growing and likely ongoing global economic competition means that the frequency and intensity of interventions is now continuous rather than comprising periodic responses to real or perceived social and economic crises.

One of the particular and growing educational emphases for vocational education is on securing applicable student outcomes. This emphasis is perhaps not surprising when the state effort and expenditure is increasingly being directed towards occupationally specific educational provisions for occupations or at least the world of work. In some countries, this has led to vocational education being extended into high school provisions, particularly for students who are unlikely to go on to tertiary education. However, now higher education programmes offered through universities increasingly have a specific occupational emphasis and programmes that are not aligned to such emphases often struggle to survive. This is because not only are government and employers seeking applicable outcomes from university courses but students also seem increasingly to want outcomes that ensure they have the necessary competence to go directly into employment. It might be expected that such emphases would lead to a welcoming and celebration of vocational education provisions, systems, teachers and institutions. However, interest by government and other parties and agencies does not always lead to these kinds of outcomes, quite possibly because of the legacies referred to above, such as the decision-making processes that are adopted and the belief that there have to be systems, provide an inherently inferior form of education (Lum, 2003).

Indeed, this interest has manifested itself in efforts to control and regulate the educational provision and experiences and the means by which student learning is assessed and certified. It is these arrangements that, to a greater or lesser degree, now shape the intentions for vocational education curriculum in many countries. Yet, there is great consonance in the arrangements which are being exercised in countries such as the United Kingdom (Lum, 2003), Switzerland, Germany, Finland and Canada, that is, a highly top-down and regulated provision of vocational education that by degree seeks to pre-specify the desired educational intents across

the three levels of aims, goals and objectives, the content that will be taught, the methods used in teaching that content and the means by which the worth of vocational education is to be appraised. However, although there is some consonance here, it is worth noting that in some of these countries the frequency of interventions is far greater than in others, leading to a high degree of uncertainty, frustration and sense of disempowerment by those working in the sectors and for their partners (Unwin, 1999). However, Deissinger (2000) makes the point that in Germany, the abiding societal sentiment about and continuance of traditions associated with skill development have likely acted as a bulwark against constant reforms, as have occurred in the United Kingdom and Australia. He notes reforms in Germany are not enacted without good reasons or without expensive deliberations and consultations across a wide range of informed viewpoints. So, what has been discussed above as the intended curriculum has become the key object for governments and industry partners' attempts to manage and control the provision of vocational education to achieve the states' largely economic and social purposes. One of the features of this decision-making approach is that, in many instances, it is suggested that these matters are far too important to be left to teachers and other educators. Instead, people from outside the educational sphere need to advise on the educational intents, content, assessments and certification. However, despite all of the 'interest' by business, an enduring problem for many countries with advanced industrial economies, outside those mentioned above, is that employers themselves do not invest heavily in the initial occupational preparation of their workforce or its ongoing development (Crouch et al., 1999). In this way, business interests are exercising lots of care, but not taking up the responsibilities associated with realising those outcomes.

Regardless, the intended curriculum with all its institutional apparatus has become a key focus for understanding contemporary vocational education and the means by which it is proposed to be enacted. There is also a certain blindness to considering curriculum as something which is ultimately experienced by learners.

Top-Down and Bottom-Up Approaches to Vocational Education Curriculum Development

As a means of illustrating and advancing a discussion about the scope of decision-making within the intended curriculum, it is helpful to offer a comparison between a government organised and industry led process with one which is organised at the local level. The case selected here is the reforms during the 1990s and the continuing practice within the Australian vocational education system which progressed in a very top-down way. It was also supported by governments of different political orientations and key economic institutions that reflect the interest of employers and also employees (i.e. unions). These issues have been written about by many authors and over periods of time. The purpose here is not to provide a comprehensive account of how the provision of vocational education was transformed and organised in Australia, but merely to illustrate and discuss some of the characteristics, strengths and limitations of having a highly regulated, top-down and mandated

vocational education system. This approach to the organisation of vocational education has been contrasted with a more 'bottom-up' approach of the kind which in earlier times was referred to as the school-based curriculum development model (Skilbeck, 1984). One way of comparing these two different approaches is through a consideration of content, outcomes, method and evaluation. These four elements are those often seen as being common to considerations of curriculum.

Top-Down and Regulatory Approach to Intended Curriculum

Commencing in 1989, successive Australian federal governments have worked to reform the nation's vocational education systems usually under the claim of assisting to develop a workforce that is more flexible and adaptable, and which, therefore, will generate goods and services that are globally competitive. At that time, much was made of the need to be both import competing and export competitive. This educational goal sat alongside intended reforms of workplace practices as together these were seen as key micro-economic reforms (Dawkins & Holding, 1987). To remedy perceived deficiencies in the existing provision of vocational education courses a number of measures were undertaken that have had a profound effect upon the intended curriculum. The changes included (i) having national rather than state-based highly specific formulae for curriculum, instruction and assessment, (ii) adhering to national industry standards as bases for curriculum development and practice, (iii) removing graded passes and merely indicating student achievement of competence, (iv) tightening compliance arrangements through accreditation and institutional frameworks, (v) using behavioural benchmarks for assessing student competence and for associated purposes (e.g. credit and recognition of prior learning) and (vi) modularising curriculum components under national competency-based training (CBT) frameworks. These moves have been undertaken in pursuit of national uniformity and associated policy goals. In practice, these changes included the formation of a national body (i.e. National Training Board) that was to develop national industry standards for occupations and a national body that was to organise and manage a national training provision (i.e. Australian National Training Authority), rather than one premised on state and territory-based programmes and standards. It also included the introduction of regulatory arrangements for courses and providers of vocational education programmes that extended to legal definitions of educational awards and the introduction of a competency-based training approach to education and assessment. Amongst all these regulatory arrangements, CBT was proposed as a vehicle that could (i) quantify and deliver exactly what skills industry needs, (ii) address problems associated with time-serving vocational education and training arrangements and (iii) permit the organisation and administration of vocational education to be closely linked to industry needs and, in particular, the reform of work practices through industrial agreements (Dawkins, 1988). This allied micro-economic process included aligning vocational educational provisions with restructured industrial awards, thereby placing vocational education in a subservient role to industrial relations reform. The establishment of the CBT approach was a key intention and followed a particular course. Firstly, as noted,

government established national industry standards which also reflected the requirements of national industrial awards and the wishes of bipartite corporate interests (i.e. employers and unions). These requirements were extended to include the formation of national industry sector committees which organised national curriculum documents (i.e. syllabuses). As well as their representation on national peak policy and regulatory bodies, bipartite interests were to comprise the membership of industry training advisory boards established at both the state and national levels.

So, within each industry sector, the overall framework and procedures for enacting vocational education provisions, decision-making bodies comprising industry representatives were constituted at both the state/territory and national levels. Hence, the process is often described as being ‘industry led’. In fact, they were led by government and had a strong relationship to industrial relations (i.e. the processes used to negotiate workplace conditions and wages) which were framed by government policies associated with industrial relations. Indeed, at that time, the vocational education systems in Australian states were taken out of departments of education and relocated within industrial relations departments. Where it was justified, such a move was premised on making these systems more responsive to industrial requirements. Hence, in ways analogous to what has occurred so often previously, vocational education was subordinated to industrial interests and conflicts. For instance, in the late 1980s and early 1990s, a range of entry-level training programmes did not progress because no industrial representation existed. That is, if there were no industrial partners, the courses would have no sponsorship and, therefore, no support from government. However, the frameworks in which advice and decisions were made were themselves constrained by government mandates. For example, these spokespersons were not permitted to decide whether CBT was an appropriate approach as this was mandated, as were the requirements and formats for national standards, recognition of prior learning and accreditation and certification processes. So, rather than being industry led, these spokespersons for industry were co-opted and complicit in the implementation of government policy, albeit with strong bipartite support. Not the least of this is that the industry training boards that employed them were directly funded by government. So, there was a clear, systematic and nationally organised attempt to manage not only the vocational education system and to make it more responsive to industry but also to carefully manage the content, the methods of teaching and assessment, and, in particular, the outcomes of the vocational education system. Indeed, it was these outcomes that were the focus of political, public and governmental discourse. Given this emphasis, a central element in the provision of these reform processes was the uniform implementation of competency-based training. Yet, much of these provisions were aimed to reduce the prospect, scope and application of decision-making by others. In essence, these measures were to make the curriculum teacher-proof and set out the bases by which students would learn and be assessed. Amongst very wide consultation during this period, boasted as 1300 such consultations, there were two groups that were just about completely excluded: teachers and students (Anderson, 1998).

Therefore, the decision in 1989 to implement a uniform national CBT approach was founded on the belief by government and ‘industry’ that developing a skilled

workforce through a centrally controlled and industry-mandated nationally uniform provision of vocational education ought to be the prime focus for the vocational education sector. It emphasised that decision-making had to be centralised and that teachers were to be mere implementers and students passive recipients of others' decisions. Government, supported by its bipartite collaborators (i.e. spokespersons for employers and for employees) proposed that such a move would enhance the quality of the Australian vocational education system and, because of industry support, would see an increase in the commitment by enterprises to vocational education because it was relevant to their needs (Dawkins, 1988). In a move characterising the governmental use of mandate, the then federal Labour government invoked financial arrangements that resulted in tying funding for the states and territories to their compliance to nationally uniform prescriptions for and provisions of vocational education (Lundberg, 1994). Hence, goals for increasing both the quantum and quality of vocational education were to be realised through the uniform adoption of this approach to vocational education and funds would be distributed on the basis of these goals being achieved. As intended, these measures brought about significant changes to the provision of vocational education, including the collapse of curriculum organisation and structured engagement at the local, regional or state level. Instead, the national vocational education authority was the sole mediating agency. Indeed, within these arrangements, the term 'industry' refers to the spokespersons for the sectors of industry that comprises the public and private enterprises, as organised into industry sectors by government. These spokespersons were bipartite reflecting the interests of employers (i.e. peak employer groups) and employees (i.e. unions) within each industry sector. Decision-making about the content, outcomes, methods and evaluation were all made in these arrangements. Moreover, they were very 'top down' because they were formulated and mandated at a national level through processes of consultation with industry stakeholders. The vocational education system's role then was to implement what had been decided. The language of the vocational education system also changed. The term competence became associated with behavioural measures that sit within a competency-based training framework, vocational education institutions of all kinds became referred to as 'providers', though by positioning them as institutions which merely provided what others had decided should be provided. Delivery also became a term that was used to describe the process of teaching, and almost without question, the process of learning. That is, teachers 'deliver' pre-specified content, and what was delivered was that which was learnt by students.

Not surprisingly, commentators have viewed these changes as being driven by a concern for control over and management of vocational education, rather than quality of educational outcomes (Jackson, 1993; Stevenson, 1995). The aim of the changes to institutional practice was initially towards a nationally uniform provision of vocational education. That is, it was about changing the institutional context in which vocational education was practised. Indeed, policy interventions of this kind, when initiated by government, are aimed at reshaping the frameworks of other institutions (Stretton & Orchard, 1994). So as institutional frameworks (i.e. norms and values) are transformed, so are the practices within them. It should also be noted that

given the energy of this drive, the agreements forged across states and territories and the engagement with bipartite processes, opposition to or criticism of these arrangements was not welcomed. Hence, critiques by researchers were not welcomed, nor were complaints by those who had to implement these arrangements. The industry partners contributed to what might be seen as being a corporatist approach that existed amongst government, capital and labour. However, there were also many disenfranchised by this process, particularly those who had responsibilities within the vocational education system, especially those who were expected to implement what others had decided should be taught. Yet, whereas many of those making decisions were not always directly knowledgeable of the content area, most of the teachers could claim to be highly competent in the occupational field in which they taught. For instance, it was almost a standard requirement in the Australian vocational education system that to teach trade or occupational qualifications, significant experience within the occupation was mandatory. Hence, many teachers were disaffected by the mandated nature of their teaching content and roles and also the request to assess students as being either competent or not competent, rather than grade their educational achievements.

The position of the unions, as representatives of labour, is particularly curious given their opposition to Taylorist prescriptions earlier in the century. These prescriptions are the workplace organisational analogue of CBT (Billett et al., 1999). Even more curious is that, in support of the corporatist approach to curriculum development and implementation, unions were complicit in attempts to remove the discretion of unionists (e.g. teachers) (Billett, 1995). So it seems that government policy, which was focused on micro-economic reforms, drove the so-called 'industry-led' process, albeit by complicit corporatist bipartite interests. This suggests that institutional concerns associated with control were privileged over the quality of educational practice (Jackson, 1993). Those with educational expertise were largely excluded from the policy advisory processes. So, within the tripartite processes of decision-making, existing knowledge about educational practice required to achieve governmental goals was ignored. Educators were perceived to have failed to deliver appropriate vocational education provisions. Industry leadership was required to secure a responsive vocational education system that could deliver to industry a flexible and adaptable workforce. Equally, it seems the policy advisory processes ignored decades of research into how best to develop skilled workers. Instead, industry knew far better (Billett, 2004).

Given the scope of these reforms, it is worth briefly recapitulating their extent using the key elements of curriculum: content, outcomes, method and evaluation. The content of courses became prescribed by the industry-based training boards. Only that content which was endorsed as being nationally appropriate by the boards could then be offered through publicly funded vocational education programmes. This content focused wholly on particular technical capacities, almost returning the debate about the knowledge required for vocational practice to *techne*. Yet, in doing so, this kind of educational focus denied strategic learning about occupational practice, not to mention those that young people might need to know about to improve their general education. So, the content was defined by people outside the

vocational education system, verified by industry training boards and then ratified nationally to constitute the national courses for the vocational education system. If somebody wanted to teach content outside these nationally endorsed programmes, it would be very difficult to secure any publicly funded support, and also this teaching could not be recognised or certified through education awards with names such as Certificate, Diploma or Associate Diploma, because the use of these words as proper nouns required adherence to legislated requirements which included nationally endorsed content. Instead, the outcomes of vocational education programmes were only those that were endorsed in the national curriculum documents and standards. These were stated in behavioural terms which were supposed to pre-specify the desired learning outcomes. Any learning outside these pre-specified outcomes was not assessed or certified. A particular concern here was that behavioural measures and objectives deny a focus on processes that can effectively capture basic requirements such as safe working practice. Much of the method was constrained to the particular provisions of competency-based training and assessment and these measures were included in the requirements for educational 'providers' to be registered to be funded to teach these courses. It is worth mentioning here that there are different kinds of educational intents, other than the use of behavioural objectives. In particular, there are intents that focus on the process of education and the process of learning, that is, to offer experiences and assess outcomes associated with learning processes. One of the key concerns and complaints about the behavioural approach is that it fails to acknowledge the importance of learning the kinds of processes that experts have developed and use in their work (i.e. through process capacities). It follows that given such an outcome-focused approach, the means of evaluating whether the intentions of the curriculum had been achieved were very much constrained to those which were pre-specified for it and whether the particular provision had met these goals.

In sum, it can be seen that the scope and depth of the organisation of vocational education and the decision-making within it were highly centralised and undertaken by particular socially privileged voices, i.e. those representing the interests of capital labour. In doing so, this rehearsed and replicated the approach to vocational education that has been exercised across its history, and more particularly as a sector of tertiary education in its own right. Central to the initiative here was that the intended curriculum should be so comprehensive and complete that decision-making by others was minimal and negligible in terms of impact. All this denies that other human actors are involved in the provision of vocational education. The approach was to develop a teacher-proof vocational education system in which students would engage with and reproduce the content that had been selected for them. For instance, as Estola et al. (2003) note, all this does more than merely deny individuals' (e.g. teachers') contributions, sense of self and vocation; it works directly against these. Certainly, there continues to be considerable pressure on vocational education and educators to develop curricula quickly and responsively to industry and enterprise needs. Of course, such haste can lead to national occupational data being used as the only basis for curriculum decision-making, without sufficient regard for situational variables, or consideration of alternative orientations to curriculum development.

The result can be narrow, specific, reproductive intended curriculum with limited time horizons and with little potential for interesting and challenging outcomes that contribute to learners' overall development. This indeed is a common label attached to the approach outlined above. Consequently, it is worth considering other kinds of approaches to organising vocational education.

Curriculum Development at the Institution, College or Workplace Setting

In contrast to the top-down approach to curriculum, Skilbeck (1984) refers to the school-based curriculum development (SBCD) model as one that responds to local factors and requirements. However, his conceptualisation has direct applications for vocational education. The concept of SBCD has in the past been instrumental in proposing a view about shifting some of the responsibility for curriculum decision-making from central authorities to institutions and those who teach. It enacts a belief that some curriculum decisions should be made by the teachers who implement them. Consequently, it is useful to examine the concept of SBCD to consider its relevance to vocational education and make comparisons with the above approach to the intended curriculum which is heavily premised on decision-making by those outside the educational institution. These considerations extend to the degree by which those who implement vocational education (vocational educators) should make curriculum decisions, which decisions these might be and how this decision-making impacts upon what is enacted and experienced.

Importantly, the SBCD approach does not vest the entire responsibility for the development of a course with local informants. Instead, it proposes a shift from having only external input through providing a legitimate role for local input. Therefore, it is not a teacher-premised approach to curriculum development. Instead, it draws upon sources from both within and outside the school, college, vocational education institution or workplace. There is provision for local needs and requirements (e.g. students' backgrounds, readiness and local resources) to be considered and addressed in conjunction with external requirements (e.g. national, occupational and core requirements). Instead, it needs to be considered what combination of approaches and techniques should be best deployed to provide vocational education programmes that are challenging and generative of rich vocational knowledge. These processes should not only aim to understand the occupational intents and content but also need to inform about the circumstances in which these occupations and courses are to be enacted. In this way, the differences and inconsistencies between the 'intended' and 'enacted' components of the curriculum process can be reduced so that they can become more aligned.

In contrast to the reform of the Australian vocational education system described in the previous section, it is worth considering how a 'bottom-up' approach to the intended curriculum, such as the SBCD, might have progressed. Before embarking upon the reform of the Australian vocational education system in 1989, a delegation of industry leaders, unionists and politicians visited Germany and many of the

reforms that were implemented were claimed to be a product of that visit. Yet, the difference between the German approach and what was implemented in Australia was enormous. However, for the purposes here, it is worthwhile noting that while the German system does have a strong commitment to national standards to be achieved, this is premised upon a tripartite set of negotiations. That is, there is much consideration of local needs and requirements and also the provision of vocational education (OECD, 1994a, 1994b). The ability to negotiate some of the content and design outcomes at the local level is greatly valued in the vocational education systems in Germany, Switzerland and Austria. Much of this ability and decision-making is premised upon the mature relationships which exist amongst enterprises, vocational colleges and industry. And, rather than all of the content and outcomes being pre-specified, negotiation occurs about how these more detailed statements of educational intent might be stated and also how the content might be provided. Certainly, the evidence suggests that, not surprisingly, the requirements for particular occupational practice differ across the workplaces where these occupations are enacted. This means that the requirements for competent performances are in many ways highly situated (Billett, 2001a). To reuse the examples applied elsewhere in this book, the capacities required to be a mechanic in a garage in a small country town are very different from that to be a mechanic in a large city dealership. Also, what nurses do in small country community hospitals is very different from what their counterparts do in large teaching hospitals in metropolitan centres, etc.

Indeed, there are quite different specialisations within occupational practice which are likely to be enacted in both large and small communities and perhaps increasingly so. Consequently, there appears to be a need to identify the requirements at the more local level and organise educational provisions accordingly rather than trying to pre-specify nationally what constitutes the requirements for a particular occupation. This is not to deny the importance of the canonical knowledge of the occupation which all practitioners should know about and be able to practise in ways appropriate to that occupation. It is this knowledge that can comprise the bases for national courses, national certification and occupational endorsement. However, such measures should not be so prescriptive as to deny the variations of occupational practice and requirements that occur and can be best understood at the local level. Consequently, it could be proposed that both the content and the outcomes of courses need to be understood more at the local level where the skills are practised and the needs and readiness of students can be effectively appraised. Moreover, given the need to address these kinds of differences in occupational requirements and student needs, there should be latitude in the methods or approaches used to assist securing the required learning most effectively. For instance, in studies which have sought to understand the needs and requirements of communities for vocational education, clear differences emerged in the skill requirements, community engagement and the needs of the community for vocational education provisions (Billett & Hayes, 2000). Therefore, such a localised focus seems quite appropriate, as long as it sits within a framework which is generative of the canonical occupational knowledge and provides learning that is certified and legitimated as being worthy of the credentials awarded.

As is discussed in the section below, the decisions about whether the approach to curriculum should be premised in the top-down or bottom-up way has a profound impact upon how the enacted curriculum progresses. The point being made here is that the intended curriculum often seeks to set out the content, outcomes, method and evaluation. Yet, the degree by which these are tightly and forcibly specified in institutional arrangements, which make negotiation problematic and options narrow, renders in quite distinct ways the provision of vocational education. There is a strong view that pre-specified and narrow educational intents are unhelpful for a range of reasons, but none more so than when they are developed at a distance and by individuals who can never understand the teaching context or the needs and capacities of those who are being taught. Having considered the scope and decision-making of what can and does constitute the intended curriculum, it is necessary to consider the scope and decision-making that occurs in the circumstances in which the curriculum is implemented: the enacted curriculum. As mentioned earlier in Chapter 2, one of the features of vocational education is the diversity of the institutions and settings in which it is enacted. Therefore, when considering the nature of the enacted curriculum, it is important to accommodate the fact that this is something which occurs in a range of settings which are not restricted to activities and interactions within education institutions within higher and vocational education.

Enacted Curriculum: Scope and Decision-Making

The majority of the readers of this book will live in countries in which the state takes a keen interest in education, all citizens engage in compulsory education and many go on to learn their occupations within tertiary education institutions such as universities and vocational colleges. Hence, the idea that the content, outcomes and proposed method of teaching are vested within educational institutions and centralised agencies is well accepted, perhaps unquestioningly. Indeed, it is difficult to conceive that the vast majority of educational provisions across human history have been organised and conducted by those located in the circumstances in which the learning occurs. Hence, those who enact or implement the curriculum have traditionally also been those who made many of the key decisions about its purposes, forms and intended outcomes. As was noted above, the origins of the word curriculum are found in Hellenic Greece and did not explicitly refer to what occurred in educational institutions. As also noted in earlier chapters, as with other kinds of learning, much of the preparation for occupations has occurred within family across civilizations in ancient Mesopotamia (Finch & Crunkilton, 1992), China (Kerr, 2004; Barbieri-Low, 2007) and Greece (Lodge, 1947), and across European history (Greinhart, 2002). Much of this education was for occupations which were deemed to be not worthy of having formal instruction because it was presumed that the knowledge required to be learnt did not warrant specialist forms of instruction or education. Moreover, as Clarke (1971) reminds us, these kinds of family-based provisions extended into the prestigious occupations of medicine and architecture as well. Indeed, the provision

of learning organised through educational institutions largely came about because of the breakdown and limitations of family-based system of medical training to meet the growing demand. For instance, the inclusion of the experiences in education institutions for medical students to learn about anatomy arose because of a lack of opportunity for medical novices to learn anatomical knowledge in family-based provisions of professional preparation. The same appears to be true for the development of the textbook, which seemingly came about when those who practised medicine were no longer able to provide the level of direct teaching required to learn medical concepts and propositions. Hence, this knowledge was needed to be codified and made available in more accessible forms. Certainly, it has only been in the last two centuries that a mass- and state-organised provision of education has been enacted in most countries. Until that time, the vast majority of learning experiences were those conducted locally, mainly in families, and to meet both occupational and societal goals. Hence, the educational provision that secured enhancements and continuity to human knowledge were largely outside provisions within educational institutions.

The point here is that until this time, it was those who actually organised and enacted experiences for learners who made the majority of decisions about curriculum in terms of content, outcomes, method and the degree by which, and for what purposes, they would evaluate the learning experiences and outcomes. However, considering the enacted vocational education curriculum and the decisions that have been made by those who implement is not just of historical interest. The decisions made by those who enact the curriculum are central to the quality of the experience provided and determine how students will come to experience and learn from what is provided for them. Moreover, those who enact the curriculum (e.g. teachers) also have a set of roles that are most helpful in informing the curriculum process and the quality of learning experiences and outcomes. They are likely to be familiar with the students they teach, which can shape the approach to what is taught and how it is taught. Also, the means by which teaching proceeds can also change, because they are influenced by factors that are a product of the particular teaching environment (e.g. vocational education institutes and training facilities). For example, the introduction of initiatives such as computer-based or self-paced learning can have a profound impact on the approach to interactions with students, the planning for instructional activities and the management of students' learning that are best suited to a particular setting or situation (Mealyea, 1985). Moreover, inevitably, the qualities and capacities of teachers will also influence how they respond to what others believe is important (e.g. the intended curriculum). So there are factors in each situation where the teaching occurs that shape how the curriculum is enacted.

Consequently, the capacities of those who implement the curriculum are very necessary components of the curriculum process and attempts to teacher-proof the curriculum are misdirected and uninformed. That is, there is a legitimate and important role for curriculum decisions to be made by those who implement and these decisions need to be made in ways which are quite distinct from those that are made by central agencies and organisations. Central among these distinctions are the importance of understanding the students, the context in which they work and learn,

how the community engages with institutions and the students, and their informed choices about the pedagogic practices which they employ and the means by which they assess students' progress.

Enacted Curriculum: A Focus on Practice

As noted, in Hellenic society, vocational training largely occurred outside educational institutions. Certainly, there were no schools or technical institutes, either public or private where the future smith, carpenter, potter or weaver could, for a fee, receive instruction. Crafts work was hereditary and its techniques were passed on from father to son (Lodge, 1947). There may well have not been much in the way of direct instruction, as it is understood in contemporary classroom practices. As reported elsewhere in anthropological accounts, the process of learning involved much observation and imitation and arose through engaging in activities and interactions through participating in the occupational practice. Essentially, sons learnt their trades through growing up in their father's family, participating in the family activities and imitating what their father did.

> At first, the imitation would be playful and childish, carried out with such toy tools as a child could handle. Later it would become more deliberately purposive. Practice produced technical proficiency in details and the growing boy would act first as his father's 'helper', then as his associate, and would eventually himself become the head of a family, and the centre from which further training in the family craft would radiate. (Lodge, 1947, p. 19)

Plato also referred to this learning process in *Laws*:

> To be good at anything, it is first necessary to practice that thing from youth up, both in play and in earnest, with the particular movements which the work requires. The boy who is to be a good builder must play at building children's houses. The boy who is to be the carpenter learns to measure and apply the line in play. They use mimic tools, learning while they are young the knowledge which they will require for professional practice when they are grown up. The child is trained in acquiring the excellence which the man will possess to perfection. (Lodge, 1947, p. 18)

In this way, the curriculum, or course to be run, was one that was structured within family life and commenced with children's play and then engagement in the tasks undertaken through the family. This was seemingly often without direct instruction, and seemingly never with attendance at an educational institution. Moreover, access to these learning experiences was also regulated by those who enacted them. Although largely reserved for the family's children, access was also open to relatives, adopted sons or members of other families who were invited to participate and also non-family members paying fees and perhaps coming to live with a family to learn this knowledge (Clarke, 1971). Similar processes are reported in ancient China, where family obligations and also fee paying were reported as practices through which families took on other families' children for them to learn an occupation (Butterfield, 1982). The professional artist in Hellenic Greece, however, was almost always the son or daughter of the artist (e.g. flautist) (Lodge, 1947). Yet,

the approach to learning this occupation was similar to what occurred in the trades. Indeed, Plato makes very little distinction between the vocational training of the artist and the vocational training of the crafts worker. Such an approach and pathway was consistent with what Aristotle referred to as correlative capacity: the way to achieve a goal is to develop correlative capacity (Morrison, 2001). The examples he uses are that if you want to build ships, learn shipbuilding. If you want to promote public good, study statesmanship and so on. He also suggested that physicians' own experience of poor health provides a potent base for them to be informed about others' ailments (see below in the experienced curriculum).

In this way, the course to run was organised for learning to occur through association, imitation and practice, and also through life, to use the full definition of the term '*curre*'. Yet, beyond learning through the senses and by trial and error, some of these occupations acknowledged that there was an intellectual component, that is, structures that 'can be apprehended, not by the senses, but by the reason.' (Lodge, 1947, p. 20). Here, it was suggested that some artisans had tools which performed these requirements (e.g. measuring instruments, a lathe). However, beyond the art of exact measurement and the manipulation of measurement, was a requirement which depended upon sensation. For instance, with building, it was known that to achieve the effect of making supporting pillars appear straight, it was necessary to make them slightly thicker in the middle. Yet, despite acknowledging the importance of this work and the knowledge required for it to be undertaken, the privileging of particular kinds of work still occurred regardless. For instance, both artisans and artists were not philosophers. Neither would philosophers be artists. However, philosophy was valued at a higher level than artisans' and artists' activities (Lodge, 1947, p. 21). Similarly, the sciences were made distinct from arts and crafts through an acknowledgement of the intellectual capacities required for scientific pursuits. As noted, both architecture and medicine involved intentional experiences that were solely aimed at developing scientific foundations (Clarke, 1971). So, experience is an essential requirement for effective learning of an occupational practice. Yet, this experience is underpinned by a scientific knowledge that allows the practitioners to use it with greatest effect. In addition, genuine physicians are expected to be practical philosophers.

As above, the enacted curriculum can be defined simply as what is implemented in particular situations as shaped by those who teach the course and the specific demands of the situations. This view proposes that the resources available, the experiences and expertise of the teachers and trainers, shape the implementation of curriculum and their interpretation of what was intended, their values and the range of situational factors that determine students' experiences. The 'hidden curriculum' (Anyon, 1980) – that which was not directly intended by teachers but happened nevertheless – is an element of the 'enacted curriculum'. For instance, whether learning within family or within an education situation in which teachers instruct, individuals would learn about power relationships, hierarchies and orderings in ways which may have not been intended. Yet, clearly the organisation and provision of experiences and how they are enacted are going to be central to what learning occurs, through what means this occurs and whether or not the intentions of those who sponsor the

educational provisions or other outcomes are realised. Therefore, it is important to understand the factors that shape the 'enacted curriculum' to understand the form and dynamic qualities of these factors because they are subject to change and the impacts of those changes are salient to the experiences that comprise the curriculum when enacted.

Yet, the enacted curriculum is not something solely determined by those who teach. As noted, there are a range of factors that shape what is enacted and there are also often attempts to control the 'enacted curriculum' by those in centralised roles. In fact, the more detailed and prescriptive the intended curriculum, the more likely there will be efforts to control what is enacted as the case study about the reforms of Australian vocational education above indicated. Yet, even when there is the genuine intent on the part of teachers and others to implement with great fidelity what is intended, there are a range of factors that may influence whether such an outcome is possible. In translating what was intended into experiences for learners, the available resources, teacher beliefs and expertise as well as student characteristics are just some of the factors that will determine the degree by which what was intended could be, or is likely to be, implemented. Enacting a curriculum is necessarily shaped by teachers, students, resources and planning processes.

Therefore, consideration needs to be given to both the 'available curriculum' (i.e. that which can be taught using the available resources) and the 'implemented curriculum' (i.e. that which is actually taught by teachers) factors that influence the enactment of curriculum. These factors can be categorised as being either (a) internal or (b) external to the particular educational setting (see Table 8.1). The external factors include the kinds of courses being taught, particular emphasis associated with the course, access to employment-related work experiences and so on. Factors such as student readiness (based on prior knowledge, familiarity with study, etc.) will determine how teaching proceeds.

These kinds of factors are only likely to be comprehensible in the circumstances in which the curriculum is enacted. There are also factors that are internal to the situation in which the curriculum is enacted (e.g. vocational institute, school, private provider and workplace) that influence how the curriculum is enacted. These factors can include the availability and distribution of resources including equipment to practise on, opportunities to engage in authentic practice-based experiences, the environment in which instruction will proceed, including staff resources and facilities and the particular expertise of those who instruct. Collectively, these are what Glatthorn (1987) refers to as the 'available curriculum'. For instance, the resources of the educational setting might determine what can be taught and in what ways. If only a limited number of pieces of equipment are available, it may be difficult to have whole class activities. Some programmes will be enacted in circumstances in which the opportunity to engage in practice is readily available. Take for instance the examples of hospital-trained nurses who would spend the vast majority of their training period engaged in nursing work albeit in rotation across a range of hospital wards which could assist them in understanding how the processes of nursing are enacted with different kinds of patients and ailments. Also, if no specialist equipment is available at the institution, alternative kinds of experiences may be required,

Table 8.1 External and internal factors influencing the enacted curriculum

External factors	Internal factors
Cultural and social changes and expectation, including community demands and assumptions, employer expectations, students' expectations and values (e.g. what are desired standards and outcomes from the community – employers, students, parents and enterprises)	Students: aptitudes, abilities and particular educational needs (e.g. readiness of students, homogeneity or diversity of students and capacity to work independently)
Educational system requirements and mandates (e.g. policy statements, accreditation, examinations, trade requirements, legislative provisions and educational research)	Teachers' values, attitudes, skills, knowledge, experience, special strengths and weaknesses and roles (e.g. particular expertise, views about education, social roles and familiarity with students and content)
The changing nature of subject matter and its applicability to a particular context (e.g. new methods, technology, outmoded strategies and what is required in that locality)	Values, profile and political structure of the education institution: assumptions and expectations including traditions, power distributions, authority relationships, methods of achieving conformity to norms and deviance (e.g. which courses or areas are seen to be most important or prestigious in the institution)
The contributions of external sources (e.g. industry advice, industry developed programmes research institutes and specific requirements of particular employers and enterprises)	Material resources including plant, equipment and potential for maintaining and improving these (e.g. what physical resources are available and their appropriateness for the requirements of the course)
Flow of resources into the educational institution (e.g. funding transfer for designated purposes and programmes)	Perceived and actual problems and shortcomings or successes of existing programme within the institution (e.g. the standing in which the course is held)

such as industry visits or work placements. The availability of these visits or placements is also far from consistent. Moreover, the particular expertise and values of staff will also determine how the course is taught and the way that it is taught. As is elaborated upon below, these factors will shape how the intended curriculum is enacted.

As indicated in Table 8.1, there are a range of factors that constitute what and how the provision of vocational education is enacted. The point here is that no amount of detailing and pre-specification of what has to occur in the form of an intended curriculum as a document, set of standards or mandates about accreditation can either be prepared to accommodate, negotiate around or mitigate these range of factors. Moreover, it seems quite unreasonable to believe that the worth of educational responses to many of these sets of factors can be enacted other than by those who are placed locally to make decisions about how best to proceed. Of course, just as in earlier times and outside society-organised provisions of education, this decision-making is largely that which is undertaken by those who teach or otherwise provide experiences in implementing the curriculum.

Teachers' Role and Decision-Making

It follows from the above that those who implement experiences for learners necessarily have to make decisions about the content they teach, even if it is merely the pace and emphasis they give, how that content should be sequenced, the ways in which experiences can be provided for learners (i.e. how it will be taught) and on what basis judgement should be made about learners' progress. As noted above, across human history, most decisions about these matters are likely to have been made by those who provide and implement experiences for learners within workplace and family settings. In some ways, with the advent of state interest in vocational education, much of the discretion exercised by those who implement curriculum has been eroded. That is particularly the case within educational institutions administered, funded or regulated by the state. In the section above, it has been proposed that the intended curriculum has expanded to manage what teachers do. Indeed, some suggest that more than trying to control what teachers do, they are being punished for failing to secure societal expectations (Stevenson, 1992). This, then leads to questions about what the legitimate roles for teachers are, what they should make decisions about and to what effect. According to Skilbeck (1984), teachers have no historical right or tradition to be the central focus of educational decision-making. Instead, teaching as a profession has been traditionally undertaken as the employees of the state, church or some other institution that offers educational programmes. Indeed, that there are few situations that teachers themselves have established educational institutions to practise their profession. Further, he suggests that teachers are not the only group with an interest in curriculum, thereby meaning that they should not necessarily have a dominant role. Each educational sector has sets of interested parties that have an interest in decision-making about curriculum (e.g. government, parents, industry and professional associations). For instance, as noted, in many countries in the last few decades, government has taken considerable interest in vocational education to make the sector more responsive to the needs of industry. Indeed, arguably the role of the teacher in vocational education has been marginalised during this period with teachers' roles and discretion being usurped by increasingly prescriptive curriculum as is reported from Australia (Billett et al., 1999), United Kingdom (Lum, 2003) and Finland (Vahasantanen & Billett, 2008). The demands of government and industry and, more recently, enterprise predominate and are reinforced by curriculum frameworks that mandate requirements and possible means to teach and assess students as discussed above.

However, whilst lacking a traditional right for a central role in the curriculum decision-making and not being the only interested parties, it seems very necessary that teachers be involved in curriculum decision-making. This seems particularly the case in the circumstances in which the curriculum is enacted and is also an acknowledgement and accommodation of that role as part of the intended curriculum. Skilbeck (1984) argues that implementation seems to demand a high degree of teacher involvement. Firstly, it is not possible to contain or prescribe the activities of teachers. Within the privacy of their practice, teachers will always continue to exercise discretion (Billett, 1995). As Brewer (1978) suggests,

> . . . the most vigorous prescription could not eliminate the initiating, pacing and interpretative processes that are an integral part of . . . learning. In one sense, the teachers have always been the curriculum makers, whether they have realised it or not. They have always engaged in modifying the curricula prepared at the centre to make operational curriculum appropriate to their particular classroom.

Secondly, teachers are well (perhaps best) placed to understand the needs of their students and how to respond to the circumstances in which they teach. As cited in Skilbeck (1984), Schwab (1983, p. 245) states that

> Teachers practice an art. Moments of choice of what to do, how to do it, with whom and at what pace, arise hundreds of times a school day, and arise differently every day and with every group of students. No command or instruction can be so formulated as to control that kind of artistic judgement and behaviour . . . teachers must be involved in debate, deliberation and decisions about what and how to teach.

Thirdly, it is likely that because of their particular sets of experiences preferences and capacities, teachers will give emphasis to particular content, will use particular exemplars and will elect to adopt particular processes in the teaching of their lesson which can have quite marked differences on how students interact with the teacher and other students. Also, the ways in which teachers respond to the spontaneous opportunities that arise in the class will differ. These differences have powerful impacts upon the experiences that arise for students. For instance, the teacher with extensive vocational experiences may be able to respond in a more illustrative and fulsome way than a teacher with limited experience. The teacher who is familiar with content may be able to make links with material taught elsewhere, in ways that a novice or newcomer would not be able to. Also, teachers who value engaging students in activities and interactions may develop a set of learning outcomes that are different from those where the teacher elects to present material didactically, for instance. The appropriateness of either of these options will differ, given particular educational goals.

These claims are not suggesting that teachers should engage in decision-making about curriculum remote from other concerns and interests. Even the models of curriculum development that emphasise situational contributions still acknowledge the need to consider and account for the contributions of other interests. Rarely in the literature on curriculum is there reference to a teacher-led model of curriculum development or decision-making. However, it is questionable whether it is possible to ever position teachers as mere implementers of a curriculum that has been developed by others and often quite remotely from where those teachers practise (Billett, 1995). As Schwab (1983) proposes, the need to respond to circumstances that arise are such that they cannot be planned for and many teachers have views about how courses should proceed which are unlikely to be mere replicas of what others have constituted.

Therefore, a fundamental issue for curriculum is the nature of the curriculum decision-making in which teachers engage. A key governmental concern associated with vocational education repeatedly rehearsed is that what is determined

centrally by industry will (and should) be implemented with great fidelity by teachers. The development of national competency standards and the accreditation processes established in each state and territory have focused on attempting to ensure that what is taught and what is deemed competent is quite consistent with government-inspired prescriptions for vocational education.

> . . . the decision-making mechanisms of the government managed vocational education system are founded on a belief that it is possible to regulate how teachers conduct their practice, and indeed, how and what students will learn by means of highly prescriptive syllabus documents and associated regulatory procedures. (Billett, 1995, p. 32)

Jackson (1993) proposes that these procedures reflect an orientation that emphasises the need for accountability and control. She suggests that this emphasis is primarily about achieving administrative rather than educational goals. However, teachers' practice is not shaped by such mandates. Instead, individuals decide how they act, particularly in the privacy of their own practice. Brewer (1978) makes a distinction between the curriculum in practice and the 'cosmetic' curriculum. He claims that the trappings of curriculum intentions are often in evidence in terms of documentation and materials (the intended curriculum), but that there is a difference between cosmetic curriculum and what actually occurs in practice. For instance, government policy statements, objectives and even highly detailed and prescriptive statements of intent are statements of ideals that are rarely implemented in practice. How many teachers actually read, let alone concur with, the meaning of those who carefully prepared the statements of intent? Indeed, Brady (1995) concludes that individual teachers make most curriculum decisions within educational programmes; this includes the degree by which they see as worthwhile or even credible what is included within curriculum documentation.

In considering the kinds of decision-making that vocational educators potentially can become involved in, it is useful to reflect upon the nature of those roles and the kinds of decision-making that they encompass. According to Marland (1987), teachers can participate at four levels of curriculum roles in the curriculum development process. These are as follows. Firstly, there are teachers as implementers. This is where teachers or industry trainers implement curriculum developed elsewhere. In these circumstances, and in this role, teachers have a minimum role in and responsibility for the development of the intended curriculum. The role ascribed to them is to transmit to students what has been included in the syllabus. They are mere implementers of what others have decided should be taught and how it should be taught. Second is the role of teachers as adapters of the curriculum. In this role, teachers and industry trainers are able to modify intended curriculum that was developed elsewhere by others. This process of modification might be to meet student needs, particular sets of requirements or to work within the constraints of resources and infrastructure available to them (i.e. the available curriculum). The teacher's role is to adapt the curriculum to the needs of the local situation rather than reject entirely what others have developed. Third is the role of teachers as developers of the intended curriculum. Here, teachers are involved in designing and developing

the curriculum, usually as a member of a group to develop a curriculum to meet predetermined needs, local or otherwise. Teachers might use situational analysis or some other method of occupational analysis to secure the information required to identify the kind of content and outcomes that are required and select the kind of methods and forms of evaluation that they judge will best meet the identified needs. Then, fourthly and finally, there is the role of teachers as researchers. In this role, teachers can become involved in identifying and trialing new approaches to teaching, materials, evaluating new curricula, testing teaching strategies and gathering data on students. Here also, there is the need to be reminded of the importance of teachers' work as their vocation (Estola et al., 2003) as would be the case for anyone else?

In sum, the enactment of vocational education cannot be assumed to be implemented as it was intended even when this is attempted in the most prescriptive and regulated ways. What constitutes how the curriculum is enacted is inseparable from the individuals who have to implement it. From what has been discussed above, vocational educators have a clear role in decision-making that shapes how the curriculum is enacted. However, this suggests that new practices and worthwhile (e.g. socially just) initiatives may be implemented not as intended or simply rejected when they present a challenge to teachers' values. For example, a cohort of male teachers in a traditionally male-dominated trade area may reject female apprentices because they believe there is no place for them in the workplace. So the kinds of support and assistance required by these apprentices may be withheld. Equally, teachers who prize classroom teaching experiences may reject distance and flexible approaches to student instruction and learning, because these approaches threaten their expertise. It is, therefore, necessary to consider how teachers can be assisted in implementing practices that they find confronting and challenging. Hence, the professional capacities and development of teachers becomes a concern for the enactment of curriculum.

Throughout the discussion of the enactment of vocational education, the need to account for the circumstances in which the provision is to be implemented has arisen. This includes the interests, capacities and focuses of those who teach. Central to this consideration is that these teachers engage in making their own meanings from what they experience and making decisions about how to proceed on the basis of what they currently understand and believe to be the most expedient course of action, for whatever purpose. Yet, such considerations do not apply only to those who organise and enact experiences within vocational education. Most centrally, and perhaps most importantly, these self-same attributes are those which are employed by learners (e.g. students, workers, apprentices, novices and experienced practitioners) as and when they engage with vocational education provisions. Therefore, more than a consideration of decision-making shaping the intentions and means of enacting vocational education provisions is also that associated with the experiencing of and learning through these provisions which is mediated by participants. Hence, the next section considers the scope and decision-making by participants: the experienced curriculum.

Experienced Curriculum: Scope and Decision-Making

The experienced curriculum is what students construe and construct (i.e. experience and learn) from what they encounter when participating in an educational programme, or whenever they are thinking and acting through that engagement. Importantly, and particularly for those most interested in student learning, for many this is the only reasonable premise for and way of defining or considering curriculum (e.g. Smith & Lovatt, 1990). That is, ultimately what is intended and enacted is quite meaningless in comparison with what students experience and learn from what is intended and enacted. It may have been noticed that in the list of definitions provided in the previous chapter that only one referred to those who experience the curriculum: the students. All the rest focused on the institution and the practices not the ultimate object: the learners. The art educators (Eisner & Vallance, 1974) proposed the definition ‘The curriculum of a school, or a course or a classroom can be conceived of as a series of planned events that are intended to have educational consequences for one or more of the students’. Beyond emphasising that curriculum dimension associated with educational intentions, Eisner and Vallance was seemingly quite tentative about the potential impact of curriculum upon students. They hint that it may (or may not) have educational implications for some of those who participate as learners. He also reminds us that education provisions are nothing more or less than an invitation to change. However, we cannot be confident about the way in which students will take up that invitation. Yet, Eisner and Vallance (1974) are not alone in drawing our attention to the importance of considering the learner. A number of accounts from different disciplines make contributions which convincingly suggest that the objectives and goals for education programmes can never be anything other than intentions. It is how students take up the invitation that is so central to the educational project, albeit enacted in compulsory, higher or vocational education.

The point here is that, ultimately, it is students who make decisions about how they engage with what they are provided through educational programmes and experiences. This includes the degree of effort that they exercise when engaging with what they experience. So just as with vocations being something that individuals have to assent to, because what constitutes a vocation is shaped ultimately by personal factors, the same can also be said for how individuals construct meaning from what they experience. Even if their intentions are aligned with what is being taught, the processes of construal and construction may either support or frustrate those intentions. The richness of their experiences and the quality of their engagement are likely to be central to the quality of their learning.

Plato in the *Republic* placed particular value on the personal experiences of practitioners

> The best physicians are those who have treated the greatest number of constitutions, good and bad. From youth they have combined with their knowledge of their art the greatest experience of disease. It is better for them not to be robust of health themselves, but to have had all manner of diseases in the own persons. For it is not with the body, but with the mind that they cured the body. And thus they infer further bodily diseases of others from the knowledge of what has taken place in their own bodies. (Lodge, 1947, pp. 42–43)

It is likely that much of individuals' decisions about how they engage in and what they learn are premised upon their personal epistemologies – ways of construing, understanding and responding premised upon their existing knowledge and capacities (Billett, 2009). These epistemologies arise most likely in person-dependent ways across individuals' life histories. They are not and cannot be the same, although many parts are likely to be shared as results of frequent engagements which lead to shared meaning or intersubjectivity. These epistemologies will also have within them dispositional qualities associated with interest, values and beliefs which stand to motivate and direct the degree by which they engage and learn from particular sets of experiences (Perkins et al., 1993a; Perkins, Jay, & Tishman, 1993b). As well as mere capacities, there are also individuals' interest and intentionalities, albeit these are also shaped by personal and cultural preferences. Moreover, beyond personal epistemologies are the brute facts of humans, such as their existing knowledge, capacity to process new information, abilities for hearing and observing and potential to fatigue. Certainly, the brute world has delivered to humans fantastic capacities that distinguish us from other species on this planet. We have powerful memories that allow us to develop understandings, make associations, develop procedural and conceptual capacities and recall these capacities and understandings when responding to what we experience. However, these very capacities are limited in some ways by our processing capacity and our proneness to fatigue. Put simply, humans are not machines and our engagement with and responses to the world beyond the skin will not always be wholly consistent, coherent or even logical from some objective stance.

From a constructivist perspective, much of the above is essentially orthodox. It has long been understood that individuals are meaning makers and when we engage in activities and with others we 'make sense' of the world ourselves in particular ways. Therefore, what humans experience and what they interpret and construct from that experience is premised on their existing capacities and personal epistemologies. In the section above, it is proposed that teachers do not unquestioningly implement syllabus documents developed by others. Instead, they make judgements based on premises such as how it meets their needs and those of their students (e.g. their intentionalities, interests and values). Hence, the same also goes for students and the constructive process that comprises their engagement with what is implemented by teachers and others and how it is aligned with their current understandings, interests and goals. They make sense of what is provided for them and how they categorise what they experience, what they give attention to and what they learn from these encounters. For instance, in a recent project investigating how to integrate students' experiences in practice (i.e. workplace) settings into the curriculum, it was found that many of the students are quite strategic in their use of time and effort, and will only engage with experiences that they believe to be worthwhile. Furthermore, they will only engage with those experiences effortfully when they address the students' immediate concerns (Billett, 2010). That is, rather than students being seen as being 'time poor' they are in fact 'time jealous'. That is, rather than just being short of time they make judgements about how to most effectively use their scarce time. Because they have lives outside their studies, and most are engaged in paid part-time work for significant hours, these students critically

appraise the value of experiences that are provided for them by the educational institution. They make judgements about the worth of those experiences and in what ways, if at all, they should engage with them. That is, they are highly selective about what experiences that are provided for them they engage with and for what purpose. Although this is starkly evident in this recent set of studies, the issue of finding a basis for student engagement has long persisted. Indeed, Higgins (2005) proposes that the true meaning of a vocational education is that students learn best when their own purposes, albeit kindled and encouraged by the teacher, make effective certain aspects of the classroom world (arranged by and including the teacher).

So here the focus is on the actual learning of individuals that arises from their engagement in and decision-making about activities associated with experiencing what is enacted by teachers, institutions or others. The experienced curriculum focuses on questions such as the following: What learning outcomes were actually achieved through the learners' engagement with the experiences provided for them? In what ways were these attainments attributable to the intents of the programme, its means of enactment and the sense that learners made of these experiences?

Learners as Curriculum Decision-Makers

From the above, it can be seen that a person constitutes a learning environment that is shaped as much by his/her interest and perceptions, as by its location and configurations and the kind of social suggestion which is being made towards him/her. Therefore, as has been rehearsed throughout this book, it is necessary to go beyond considerations of social factors to consider the provision of vocational education and the learning that arises through it to include considerations of the persons, their agency, capacities and vocations. Rehm (1990) concludes that seeking or having a vocation is a very personal endeavour, especially through the search for meaning. But also, it is a decision that individuals make, at times with, and at times against prevailing social suggestions such as societal fashions, trends and preferences. It follows that considerations of vocational education need to include a consideration of self, subjectivity and personal goals for meaning (Rehm, 1990, p. 123). This sentiment has been strongly emphasised in the considerations and discussion of the concept of vocation here. However, rarely is it strongly made in consideration of curriculum and particularly within vocational education which is so often seen as being directed towards achieving societally identified goals and outcomes, usually associated with occupations. Because of this, it is essential that, more than seeing students as an important element in the provision of vocational education, they are made aware of their importance and engaged accordingly. For instance, Rehm contends that

> . . . whilst content experts play a significant role in education, the important point here is to get students actively involved in planning and discovering their future life directions. (1990, p. 123)

She suggests that vocational education should include the history of work, analysing the social nature of work, identifying the relations of work to other systems of

society, comparing branches of work such as that in the home, community and paid work, analysing labour and management conflicts and practising technical and communication skills. She also suggests that vocational education must expand its knowledge base beyond paid skills to include other kinds of productive activities because the quality of life in paid work is not necessarily connected. Yet curiously, whilst undoubtedly well meaning, there is a significant contradiction in this proposal. That is, somebody has presumed what students want and how their needs can be addressed. For instance, the recent work with students engaged in practice-based experiences suggest that these very topics would be far from engaging, because they do not meet immediate and emerging needs and priorities. That is, they are not a priority for the learners. Rightly or wrongly, projects that attempted to engage students in considering these kinds of ideas were only engaged with insofar as they constituted issues that students would engage with almost immediately or were relevant to the domain of activity with which they were to soon engage. Whatever the intentions, even well-meaning ones, that seek to make students more informed, these goals may not be consistent with the priorities of time-jealous students who have other priorities and interests. This is not to suggest an ‘anything goes’ approach to education or that the knowledge that has been learnt and developed across centuries should be ignored and instead individual constructivism should predominate. This is not what is being argued. Instead, the point is that it will be necessary for effective vocational education to identify and respond to the kinds of imperatives that are central to time-jealous students. Certainly, the idea of curriculum as being something conceived centrally and implemented uniformly is wholly at odds with a process which does not seek to engage, assist, identify and align experiences with students’ needs and requirements. So, in addition to consulting with the voices that speak on behalf of industry, occupations, professional associations or unions of workers, it is also important to engage with, consult and understand how learning experiences can be intentionally organised with consideration of students as well as external interests.

Certainly, the constructivist psychological perspective grants considerable currency to the central role that individuals’ agency play in the process of meaning making, which supports the claims referred to above. This agency immediately makes tenuous presumed links between the intended goals of programmes and actual learning outcomes that arise from them, as discussed above. The idea that humans are active meaning makers is helpfully illustrated by Wertsch’s (1998) use of the concepts of ‘mastery’ and ‘appropriation’. He refers to mastery as learning associated with superficial compliance to what individuals are supposed to learn, because others are pressing them to learn this content, yet which they are not overly interested in learning. Appropriation is what individuals take ‘onto themselves’ in a more full-bodied way because they believe it to be true or to be consistent with their interests. He uses the example of Estonians, who in the Soviet era would be able to repeat with great enthusiasm the Russian view of the recent history of Estonia (i.e. the Russians were liberators). However, these Estonians did not really believe this view and had appropriated what they thought to be the truer view that Estonia had been invaded and subjugated by the Russians. That is, what they have taken ‘to

be their own' was not the view they were being taught, but what they constructed from other sources. Taking another example, consider the check-out operator at the supermarket or some other kind of service worker and their standard salutation to customers (e.g. 'how are you today'). To what degree do these workers demonstrate mastery or appropriation? That is, while they may have been taught to offer each customer the standard salutation, often the performance demonstrates mastery of the act, while lacking in the intended commitment. So even when pressed to engage in content which students do not value or believe is relevant to them or what they want to learn, they may well engage in a process of mastery to appease teachers and successfully complete courses. What cannot be assured is that they have appropriated this knowledge.

These claims that students need to be seen as being more centrally a part of what constitutes vocational education find support quite broadly across the key disciplines informing educational science. From a philosophical perspective, Dewey (1916) proposed that curriculum is grounded in the activity and interrelationships of persons. He saw curriculum as an interaction between the learner and the world, of experiences as the interplay of activity, being acted upon, reflected upon and experienced by learners. In doing so, Dewey (1916) places emphasis on learning as a product of engagement in what learners experience and how they interact with the world that provides these experiences. The point here being is that it is not a one-way process of learner engagement and learning, but instead something negotiated by the learners and ultimately premised upon how they construe what they experience. Similarly, from an educational psychological perspective, Posner (1982) proposes that the tasks that people engage in structure to a great extent what information is selected from a situation and how that information is processed and, therefore, what is learnt. He suggests the kinds of tasks individuals engage in shape their subsequent experience. Consequently, changing a person's tasks changes the kind of events he/she experiences. To comprehend learners' experiences, it is necessary to understand that the tasks the learners engage in are not just the tasks that teachers provide for learners. That is, one should not presume that students will understand and engage in those tasks accordingly (Posner, 1982). Also, the kinds of experience students have had previously will be likely to shape how they engage with what is provided for them in their educational programmes. Supporting such a proposition is Newell and Simon's (1972) claim that learners generate interpretations or internal representations of the problem they are asked to address (e.g. learning tasks). It is learners' interpretation of these tasks and their subsequent engagement with them that determines what and how much they learn from their experiences. These premises emphasise that there can be no confidence that what is proposed by sponsors of the intended curriculum, who are sometimes quite remote from the circumstances of their enactment, will be engaged with in the way it is intended by those who are positioned as learners.

It seems that individuals' interpretation of any particular task is determined by the concepts available to them and by their purpose for participating in a particular experience. Furthermore, their interpretation of the task will also influence what they experience and what is learnt from the activity. Valsiner and van der Veer (2000)

refer to this as individuals' cognitive experience that arises from what they have experienced premediately (i.e. earlier). Much of this cognitive experience arises from their previous personal history or ontogeny which is fundamentally social, yet personally experienced and constructed. That is, experiences with the social world do not necessarily lead to common sets of understandings and procedures because learning has been mediated by individuals' cobbled experience. So the kinds and extents of individuals' experiences and backgrounds will influence the concepts they possess, how they view and value these concepts and what they mean in the particular context of their use. For instance, in terms of course content the outcome of an encounter is a product of students' existing knowledge, their purposes in engaging with what is being presented and their interpretation of its worth. This goes beyond the accrual of technical concepts and engages their dispositional capacities. For instance, it extends to whether students believe they will be able to learn anything worthwhile, whether intelligence is a fixed entity or one that can be developed through engagement in educational activities. So the kinds of concepts and conceptions students bring to any learning situation will influence what sense they make of these experiences, how they will interpret and respond to these experiences and the degree by which they believe it is in their interests to engage with them.

> What students learn from instruction depends primarily on what tasks the individual students are engaged in and only indirectly on what tasks teachers present. (Posner, 1982, p. 344)

This proposition further questions the prospects of what is intended being realized. It also suggests that concepts of curriculum need to go beyond what is intended and enacted. Importantly, for a consideration of what constitutes curriculum, learners may engage in activity different from what the teacher intends. For instance, an intended problem-solving activity may become a process of trial and error or guessing game by the students. From these activities, the students may develop a way of solving specific tasks. But they may not have learnt what the teacher intends. Learners shape tasks as a result of the interpretation of the present situation against past experiences, the resources they can bring to bear and the costs and benefits of task engagement, and, of course, their purposes for being in the situation to begin with. From quite a different conceptual perspective, Goodnow (1990) reminds us that not only do humans solve problems but they also select which problems are worth solving. Yet, in ways analogous to the likes of Posner (1982), she proposes that the beliefs, knowledge and abilities that students bring with them into the learning setting are a product of accommodation to their environments, and form frames of reference to which they assimilate new experiences. This has a series of implications for curriculum, particularly when conceptualised as something that when presented to learners will be internalised or learnt by them.

However, as foreshadowed, there are problematic dimensions to learner decision-making. Clearly, the resources learners bring with them can act to suppress as well as facilitate learning (Posner, 1982). Learners can be predisposed to interpret tasks in ways that result in 'unimportant or dysfunctional learning', or they can interfere with engagement of potentially productive activities. For instance, it has been found

that vocational education students whose experiences are limited to those within the technical college come to view the content of courses in different ways from those who have had experience of the world of work and the occupations they are learning (Billett et al., 1999). Hence, whereas those students without work experience may not be able to prioritise their efforts for learning because they have no basis to be discerning about their judgements, their counterparts with extensive work experience might also be dismissive of some of the contributions of vocational courses. Moreover, readiness is a significant issue for students' engagement in learning. Where students are asked to engage in self-directed forms of learning or in the absence of direct instruction, they may be unable to marshal their full resources to address a new situation, possibly because they cannot see the linkages (Billett et al., 1999) or lack the readiness in terms of the concepts and other capacities to effectively engage in the learning. All of these views suggest that what is experienced and learnt (i) may not be what was intended through the implementation and (ii) is likely to be person dependent. That is, each individual may have a different basis from which to construct his or her meaning. However, the particular cognitive experience that learners bring with them may be developed in unhelpful, incomplete or limited ways, which subsequently restricts how they are able to engage and learn through these experiences. Consequently, there are clear limitations to the fact that ultimately it is the students' experiencing of the enacted curriculum which determines what and how they learn.

All of this has particular implications for vocational education being directed to assist individuals in identifying the occupation to which they are suited and also developing the capacities for them to be effective within it.

Decision-Making and Vocational Education

It has been proposed in this chapter that the provision of vocational education needs to be understood through a consideration of at least three discrete forms of decision-making. Firstly, there are decisions about the intended aims, purposes, form and outcomes of vocational education provisions. It has been argued that these decisions are often informed and made by interests from outside the field of vocational education practice. In particular, since nation states have taken an interest in the development of skills in the workplace and employment, there has been a growing and intense engagement by government and its nominated spokespersons who reflect particular interests and whose consultations are prescribed by those interests. It is suggested that consistent with earlier practice, it is the voice of powerful others that determines what constitutes the intended purposes, intentions, processes and outcomes of the provision of vocational education. However, these provisions also have to be enacted. This enactment is probably more broadly attributed across a range of institutions and settings for vocational education than any other field of education. Consequently, the likes of teachers, industry trainers, supervisors, practitioners and others are involved in the implementation of vocational education. These individuals make decisions about how to proceed with this enactment

premised upon their access to resources, capacities, expertise and judgements about what is appropriate for students and their knowledge of the students. This decision-making is necessary because no amount of prescription or planning can possibly account for the range of circumstantial factors which shape the actual provision of vocational education. Hence, both at institutional and personal levels, there is much decision-making that necessarily occurs and is undertaken by these individuals who are implementing vocational education. It is also proposed that those who participate in vocational education (e.g. students, apprentices, learners, practitioners and so on) also make decisions about the ways in which they participate, for what purposes and with what degree of energy and engagement. This decision-making ultimately shapes how and what they learn from the provisions of vocational education. Therefore, and given the importance of these participants' engagement in and learning from vocational education provisions, they cannot be seen merely as a footnote. Instead, they are central to what constitutes the provision of vocational education. This suggests that understanding their needs and motivations, their readiness to engage and assistance in guiding their participation is likely to be central to both the provision of vocational education and the prospects for realising what is intended to be learnt. It is also central to how vocational education provision should be enacted.

It seems important to emphasise these levels of decision-making because increasingly the kind of rationalities applied to the provision of vocational education are those which assume that identifying desired learning outcomes is the key developmental concern and that much of what constitutes the provision of vocational education is the implementation of planned approaches used to realise those outcomes. What has been proposed throughout this book is, however, that these kinds of considerations are often either not understood, ignored or not welcomed in discussions about vocational education. Here, a corrective is intended.

Much of what has occurred to this point within this book relates to what comprises the conceptions of vocations, occupations and the purposes of vocational education and how they might be ordered and implemented. Along the way, much of the discussion has been focused on concerns about the decision-making of socially powerful voices that sit outside the occupations that are served by vocational education provisions and apart from vocational education. These voices have not always served well the interests of vocational education, nor promoted its autonomy and importance as a sector of education which is central to societal, personal and economic well-being. In the next and final chapter, some considerations for how vocational education might be organised and implemented are advanced. These considerations arise from the discussions across this text and advance some means by which some of the key impediments for vocational education might be addressed.

Chapter 9
Vocational Education in Prospect

To a very large extent, present-day problems in vocational education arise because of the various interpretations of what part can advantageously be taken over by the school and what still belongs to the industry, the business, or home.
(Bennett, 1938, p. 3)

. . . policy needs to have regard for the relationship between vocational education and training and the neighbouring societal subsystems, especially the employment system and the general education system, which varies from country to country, and to the traditions and mindsets that have grown up in these fields in the individual countries.
(Lettmayr, 2005, p. 1)

Vocational Education: Contemporary Positioning and Prospects

In contemporary times, the broad field of vocational education is positioned ambiguously. On the one hand, it is seen to be essential for achieving the kinds of economic and social goals desired by individuals, communities, nations, and, even global agencies. Such is its importance that the provision of vocational education is now to be found in dedicated vocational education sectors in many countries, their schooling systems and, of course, in an increasingly broad way within their universities. However, it has long played such a role in the latter. Vocational education then can be seen as an increasingly important societal project that is manifested as a field of educational endeavour, which is exercised across key educational sectors of schooling, tertiary and higher education. Moreover, this provision is not restricted to the initial preparation for working life (i.e. the development of occupational competence), but is increasingly focused on securing the kinds and levels of skills required across lengthening working lives. That is, provisions of vocational education are needed to sustain individuals' employability (regardless of their occupations) as the demands for particular kinds of work fluctuate, performance requirements for that work change, distinctive occupational needs arise in the settings where they are enacted and the means by which work is undertaken transform. In this way, it is concerned with the development of individuals across their working lives through

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provisions that are referred to as continuing professional education. Furthermore, as a provision of education focused on developments across individuals' lives, in many countries, vocational education also engages the broadest array of learners with their distinct capacities, interests, trajectories and readiness to participate. All these factors represent a significant challenge for those who organise and enact vocational education provisions.

Yet, on the other hand, it is seen as being too important to be left to those who practise and teach. With this increased interest and the heightened expectations by government, industry, employers and other key social institutions, such as professional associations, the broad field of vocational education is increasingly being shaped by the needs and requirements of those outside the educational sectors where these provisions are offered. As a consequence, such stakeholder groups often seek to gain greater control of these provisions. To some degree, this external influence has always been the case, and often quite rightly. There have always been powerful and privileged societal views that have shaped the societal standing of occupations and also the means of their preparation. However, this influence appears to be becoming more intense and regulated as it extends into schools, vocational education institutions and universities. Moreover, there are very few instances where educational institutions and practices have been sponsored and developed by teachers themselves, as most teaching occurs within institutions that have been established for particular societal purposes. In these ways, educational provisions are linked closely to and are central to the continuity and development of communities and their social and economic goals. Vocational education is no exception here. This is perhaps hardly surprising given that many of its purposes are directly aligned with interests outside educational institutions and the immediate community. Yet, these external interests are increasingly shaping the provision of vocational education when it is offered through schools, vocational colleges or universities and are having an increasing influence on the purposes, forms and outcomes of those provisions. Consequently, those who make decisions need to be well informed about the educational goals, processes and outcomes upon which they are deliberating. Yet, this is not always the case.

As has been proposed throughout this book, such is the distinctiveness and breadth of the project of vocational education, that there are likely to be clear limits to the effectiveness of any forms of external control, mandate and regulation. Without a nuanced understanding of local factors, it is difficult for a provision of education that is responsive to the circumstances of its enactment, which includes understanding students' needs and having the capacity to respond. Indeed, some of the most enduring and effective models of vocational education governance are those with a high level of engagement and deliberations amongst a range of stakeholders, coupled with discretion amongst those who implement them (OECD, 1994a, 1994b). That is, the partnership practices adopted in northern European and Scandinavian countries appear to be most mature in their engagements and careful in their means for proceeding. A key quality of those arrangements is the efforts to secure engagement with and consensus amongst the key stakeholders in decision-making about purposes, processes and outcomes. Moreover, it seems that

these kinds of arrangements are also not so prescriptive as to exclude discretion by those who enact them (i.e. teachers in vocational colleges, institutions and schools). However, such arrangements are not universal. Elsewhere, such as in the United Kingdom, Finland, Australia and New Zealand, more top-down and prescriptive approaches are adopted and the turbulence created by constant changes in and the shifting imperatives of centralised government, external advice and stakeholders impact on the provisions of vocational education in ways that are quite disruptive and problematic. Much of this problem appears to arise from the view that the goals of vocational education and its processes are far too important to be delegated to those within the field (i.e. those who know about it). Yet, where such decision-making occurs in ways that are collaborative and localised, not merely mandated from the top down, there is a more mature level of engagement and emphasis on practice that can be of the kind required for professional practice. Consequently, instead of the growing trend for highly regulated approaches to the organisation of vocational education where decisions are made top down and even legislated and mandated to ensure that the interests of those outside vocational education hold sway, a more mature, inclusive and engaged basis for decision-making is required.

Indeed, this trend of increasing regulation and control represents significant dilemmas and contradictions for the purposes and provisions of vocational education. Not the least of these is a continuation of the separation of those who know about the occupation, and its actual practice and its teaching, and those who make decisions about those matters. It seems increasingly rare that those who practise an occupation and teach within it are involved in establishing the overall purposes, let alone the detailing of how those practices might best be learnt. Instead, these issues are addressed by people speaking on behalf of those who practise and teach the occupation. Yet, an effective provision of vocational education is unlikely ever to be organised, enacted or experienced through premises and assumptions of those who are remote from both its practice and teaching, let alone from those who are learners. Hence, inclusive and engaged approaches to curriculum planning and implementation are required in vocational education. These approaches include developing an understanding of the knowledge that is needed to be learnt, the ways in which that learning occurs and the means by which that learning process can be enriched. Curriculum planners also need to have had experiences that can inform them about how the qualities of learners can be effectively understood. This is because of the array of situational factors required to be addressed in the circumstances of a curriculum's enactment. Not the least of these factors is the ability to understand and realise expectations, needs and capacities of learners. Such assumptions have long been the basis for the school-based approach to curriculum development (Skilbeck, 1984).

Yet, there is an apparent trend that globalised agencies, those in national bureaucracies and those representing both employers and employees know what is best for vocational education and those who learn within it. Often, however, these views have been proven to be quite uninformed (Billett, 2004). For example, key global agencies have suggested that certain forms of vocational education (i.e. the German dual system) are appropriate ones to be implemented in developing countries. This

suggestion is made regardless of whether those countries have the institutional infrastructure to implement such a system, let alone the capacities to identify occupational standards upon which the education provision is to be premised or how these educational provisions should be realised. What is often proposed is that consultants from the countries where the dual system operates go in and establish the means for those provisions. All of this bypasses any consideration of whether such a model is in fact the most appropriate for developing countries. However, even in countries that have developed extensive educational infrastructure, there can be no guarantee that the national standards are coherent, comprehensive and complete (Billett et al., 1999). Most often, for instance, these kinds of standards focus on observable performance of the behavioural kind and do not address, let alone promote, the capacities that underpin the kinds of performance required by expert workers. In addition, external agencies often demand the right to audit the facilities of and expertise within these educational institutions, and do so using similar kinds of performativity criteria. Yet, these criteria may well be quite erroneous. In many ways, such demands are reasonable, especially when they are agreed upon and accepted across the field. However, rather than being arrived at through consultation and negotiation, these arrangements are often mandated as requirements and not based on sound educational practices and principles. Moreover, as has been demonstrated across history, those in powerful societal positions have repeatedly demonstrated a privileged demeanour and self-interest in referring to the occupations that others undertake and in ways that are often uninformed about and unhelpful for the vocational education project. Much the same appears to be the case in contemporary times.

It follows, therefore, that if the potential of vocational education is ever to be realised, both as a broad field of education and as a specific educational sector, then a broader base of engagement, discretion and decision-making needs to be enacted. This engagement is necessary in the development of all facets of vocational education provisions: (i) the identification and description of the educational intents (i.e. aims, goals and objectives) that are sought to be achieved through these provisions, (ii) the means by which the experiences that are designed for learners to achieve those goals are to be selected and implemented and (iii) also the measures of its outcomes and contributions that are required to be met. In particular, firstly, greater discretion needs to be afforded to those who enact the vocational education provision (i.e. teachers, trainers and workplace supervisors) in specific circumstances, and, secondly, a deeper engagement with those who are its objects (i.e. learners – students, apprentices and workers) is required to understand how best their vocational goals can be realised and also enacted. That is, the process of formulating the intended curriculum has to include educational purposes that are far more broadly cast to incorporate the views of those who teach and learn as well as those who employ. Additionally, the notion of discretion needs to be built into the intended curriculum to permit the development of educational intents and processes to be generated at the local level. Moreover, those who enact the provision of vocational education should be afforded the discretion to both meet localised needs and respond to learners' capacities, readiness and interests in productive ways and as directed

towards meeting learners' vocational goals. These qualities are important because the requirements for occupational practice are not uniform. Instead, they are specific arise from the needs of particular workplaces, regions and variations of that work (Billett, 2001a). Furthermore, different kinds of learners require educational provisions that are unlikely ever to be understood and identified, let alone met, by uniform or standard implementation processes. Consequently, decision-making by those who teach and otherwise support students' learning at the local level is necessary to address specific occupational practices and the readiness and capacity of students to realise those requirements. Furthermore, there is a requirement that educators who seek to develop and enact these arrangements also have the capacities themselves to be effective in these roles. That is, like educators from other sectors of education (e.g. primary and secondary), vocational educators require a professional preparation which equips them to respond to the demanding project they have to do enact. Although many countries maintain and exercise a requirement for a full and effective professional preparation for vocational educators, this is not always the case. Thus, in some countries, the requirements for such a preparation are even being eroded, often in the name of cost efficiency. If this is part of a strategy to position teachers to be mere implementers of what others design and wish to be enacted, such an approach, as argued in Chapter 8, is both ill informed and unhelpful.

Indeed, the very kinds of specific expectations demanded at both the enterprise and occupational levels are most likely to be realised by educators who understand these requirements and proceed accordingly to address them, not by the uniform provision of experiences and the utilisation of uniform standards that often do not address these needs and requirements. Moreover, it is important that the provision of vocational education incorporates an understanding of the needs, aspirations, readiness and interests of its students. This is not a quest that opposes the interest, requirements and objectives of employers. Instead, it is about understanding employers' needs more thoroughly and responding to them in ways which also address the readiness, needs and requirements of learners. Yet, most stakeholders are likely to welcome the same kinds of goals. These goals typically include the: (i) development of the capacities required for effective occupational practice, (ii) to be able to apply that occupational competence in different ways and across a range of occupational tasks, and (iii) having opportunities for ongoing development and advancement of occupational knowledge. The capacity to apply knowledge across different kinds of occupational tasks is likely to be a predictor of individuals' abilities to utilise their knowledge as workplace requirements change. That is, their occupational competence is not wholly wedded to the circumstances in which it is learnt and practised. Whilst there will inevitably be some quibbling about the detailing of these objectives, there is great consonance within them. That is, this knowledge includes the kind that students want to learn, their employers also want learnt and is aligned to what industry claims it wants learnt. Yet, even when these occupational requirements are not negotiable and the prescription of the required knowledge for an occupation is of a high order (e.g. for safety and security purposes), it is still necessary to understand learners' needs, including their readiness to engage with the knowledge to be learnt. These understandings enable educators

to organise experiences for students to secure their engagement with and purposeful learning of this knowledge for relatively uniform outcomes. That is, consultations with and an understanding of students are required to assist them in achieving the kind of outcomes which others specify and prescribe for them. Ultimately, vocational education is about learning: individuals' learning. No amount of prescription from others can ultimately control the process of individuals' learning (Wertsch, 1998), albeit it can be shaped in particular ways. Beyond just being directed towards codified statements of occupational requirements, the provision of vocational education needs to engage with those who are both initially learning the occupation and then continuing that learning across their working lives. Such long-term engagement is necessary to assist learners in securing the kinds of knowledge which have arisen and been refined through history, and shaped by particular cultural factors and situational requirements in which they will need to perform their work tasks. This kind of localised engagement (e.g. consultations and investigations) also needs to inform (i) the goals and purposes of the intended curriculum and how these might be aligned with learners' needs, readiness and capacities, (ii) the ways that the enacted curriculum provides experiences for these purposes and (iii) the ways to assist individuals come to engage with and learn about their preferred occupation that might well become their vocation.

It is for these reasons that it is necessary to consider the kind of foundational issues discussed across this book. The importance of understanding how vocational education is positioned in a specific country and, in particular, how various vocational education sectors are located within that country and the kind of relations they have with other education sectors says much about their role and standing. This positioning, as argued in Chapter 2, does much to mediate how the provision of vocational education is supported and enacted, including the degree to which discretion is afforded to those who plan, organise and enact learning experience for students. Clearly, to draw a comparison between medical education and prevocational education programmes within the vocational education sector, there are significant differences in the esteem with which each is held, the institutional locations in which they are undertaken, their educational purposes and the extent and degree of support that is provided for the learning of these two occupations. As also noted in Chapter 2, it is not always clear whether decisions about occupations and educational provisions that support them are actually premised upon careful and objective analysis about such attributes and the ways in which capacities that are required to undertake them should best be developed.

Similarly, it is important to understand the difference between vocations as personal entities that reflect individuals' interest and desired goals (i.e. a personal fact) and occupations that stand as a product of society as categories and kinds of work (i.e. a societal fact) as proposed in Chapters 3 and 4, respectively. Both of these concepts are important when discussing vocational education because they represent two distinct sets of imperatives which are inevitably interlinked in both individual and societal decision-making about participation in and learning from this form of education. In different ways, each set of imperatives is valid and legitimate. Years ago, I taught clothing design and construction in vocational education. The student

demand for those courses was far greater than the available positions in the garment manufacturing and fashion industry sector. These circumstances, where the industry demand for courses was less than the potential number of students who wished to engage in them, led to questions about the worth of provision of such courses. For those whose vocation was to become a fashion designer or a worker in the clothing industry, some more informed than others about the prospects for employment and advancement, the provision of education was aimed to assist them in realising their vocation. Yet, many from industry claimed that these programmes were over catering and not always directed towards industry-specific needs. Conversely, the needs of the industry (e.g. production machinist) as articulated by their representatives were not what students wanted to do. Hence, having two sets of such clearly distinct imperatives (i.e. personal interest and industry demand) permit consideration of distinct perspectives about the role, worth and legitimacy of vocational education. Whilst there may be strong economic and social imperatives for particular actions to occur, reluctant students are unlikely to be the most engaged learners or effective workers.

Certainly, it is not sufficient for the important societal role that vocational education plays to permit powerful societal voices to exercise their influence in ways that are ill informed, lack balance and fail to account for both those who organise and implement learning experiences for students and also those learners' needs, interests and intentionalities. The purposes, goals and overall project for vocational education are far too important to be left to these lay interests. What is required to realise the potential of vocational education is effective and informed leadership and decision-making, not dominance by external interests.

Realising the Potential of Vocational Education

Having critiqued much of the actions by states in relation to vocational education, it is important to emphasise they can do much to elevate its status and standing and also empower and enable those who seek to secure its purposes. There are perhaps three key ways in which the status and legitimacy might be improved: (i) engendering the *berufkonzept*, (ii) building mature relationships among its partners and (iii) making space for those who can contribute to the organisation of programmes and students' experiences and learning at the local level, those who work as educators and provide learning support within workplace settings and also those who are learners (i.e. students, workers, trainees, apprentices, etc.). These are now briefly discussed in conclusion.

Having a community inherently value skilled work and those who perform it can come a long way to supporting effective experiences in both educational and workplace settings. Instead of the need to constantly and in minute detail regulate and mandate the activities of those in vocational education institutions, workplaces and those who engage with vocational education, if there was a greater commitment to the standing and value of skilled work and those who undertake it, then much of this may be unnecessary. The kinds of societal sentiments that are reported in

countries such as Germany, Austria and Switzerland indicate that there is a valuing of this work which is distinct from elsewhere. This leads to all kinds of mature relationships and arrangements. For instance, apprentices and trainees accept lower levels of pay because they are assured of getting a highly effective and thorough training. Employers, whilst paying low wages to these trainees and apprentices, are required to provide a high level of training. The parents of apprentices and trainees realise that they may have to support their children through such a period because of low wages, but will do so because, like the apprentices, they realise this is an investment in their future. When the *berufkonzept* is accepted, of these arrangements are likely to be realisable. That is, there is a genuine commitment within the overall community to the development of skills because it is accepted that these skills are important and their development is an essential societal act. So, a key role which the state can play is to generate the *berufkonzept* within its community, institutions and citizens.

Also, rather than pitting industry and educational institutions against each other and creating hierarchical relationships, the state can also act to build mature working relationships amongst the various partners that are involved in the provision of vocational education. In these kinds of relationships, it is likely that there will be a greater need for engagement and consultation of a genuine kind with those who practise and teach as well as those who are concerned with the outcomes of vocational education. Moreover, because much of the requirements for effective vocational education are at the local level and arise through negotiations between local enterprises and educational providers, they can also be the building of mature working relationships premised upon admission and less stiff arrangements which encourage and develop lasting collaborations amongst these parties. Such arrangements are likely to best come about when there is common purpose as well as mutual respect amongst the participants. So, these kinds of arrangements are also likely to be premised upon the *berufkonzept*, on the one hand, and organisational arrangements which promote and reward collaboration in working towards a common goal is associated with vocational education, perhaps most principally being the kinds of knowledge that individuals, workplaces, communities and industry all want, on the other.

Thirdly, and dealt in greater detail here is the importance of progressing in ways which open up spaces for those who organise, enact and participate in vocational education to contribute, be informed and make informed decisions. As proposed across the previous chapters, much is already known about how to achieve the array of purposes for which vocational education is charged. We know much about the kinds of learning to be achieved through vocational education, the processes for achieving them and how learners need to be engaged to secure the knowledge that constitutes these goals. This includes how those forms of knowledge can meet the needs of individuals, their workplaces and communities, and, in doing so, also address important national and social economic goals. There exists an extensive body of knowledge about what constitutes the capacities required for effective occupational practice (i.e. expertise). The ways in which particular kinds and sets of conceptual, procedural and dispositional capacities together constitute the domain of knowledge that constitutes an occupation (Ellstrom, 1998) is reasonably well

understood. Moreover, it is also understood that this particular domain of knowledge is both required and exercised in different and distinct ways within particular settings in which the occupation is practised (Billett, 2001a). So, this combination of domain-specific knowledge and variations in its application are central to guiding the purposes of vocational education provisions. In addition, beyond this domain specificity, more strategic forms of dispositions, procedures and concepts permit individuals to realise both their personal and work life goals. These forms of knowledge include the kinds of capacities required to be enacted executively in making a range of decisions about how to proceed with work life. They are associated with identifying and resolving problems, and the ability to communicate and work effectively with other people, in ways that are appropriate for a particular workplace setting.

The kinds of capacities required for occupations, and their variations and the strategic abilities required for effective work performance, are important for an effective provision of vocational education goals. This set of understandings is central to informing how the potential of vocational education might be realised, that is, the goals that should direct the efforts and direction of vocational education provisions, and the means by which these kinds of capacities can be developed. Importantly, these understandings are helpful in advising individuals about particular occupations and how they might meet their needs and interests. They also can be used to identify the aims, goals and objectives for educational programmes that seek to develop occupational capacities in students, and assist them in moving into a specific instance of that occupation upon graduation. Such goals are used to consider the kinds of experiences that need to be provided (e.g. curriculum) and how they might be enriched (i.e. pedagogically). In addition, these kinds of understandings can assist the organisation and enactment of learning experiences across working life in sustaining individuals' occupational competence and, therefore, their employability. Moreover, such a set of understandings can be used to identify the kinds of experiences that need to be considered in designing and enacting effective educational experiences. This includes consideration of what kinds of capacities are best learnt in, respectively, educational and practice settings, and the ways in which the combination and sequence of these sets of experiences can be brought effectively together. Furthermore, they can be used to identify the forms of knowledge and capacities that will require specific educational interventions to be developed because they are not easy to learn (e.g. knowledge that is opaque or symbolic) or require repeated practice and a variety of experiences to develop effectively (e.g. intricate procedures). Consequently, all these understandings must be engaged with by those who make decisions about the organisation of vocational education and the provision of experiences for learners: the intended and enacted curriculum. Hence, those with responsibilities for identifying the knowledge to be learnt and then constructing educational intents that are associated with learning that knowledge need appropriate capacities. This responsibility extends to decision-making about the kinds, sequencing and duration of particular kinds of experiences for students. In short, both the processes of and decisions about vocational education curriculum should be informed by individuals who understand this body of

knowledge and can make appropriate and considered decisions about the intended curriculum.

Yet, beyond these considerations of educational goals, much is also understood about how these forms of knowledge can be developed within learners. That is, what combination of curriculum and pedagogic practices are most appropriate for securing the required learning (i.e. developing occupational expertise). Curriculum practices that can provide experiences to assist individuals in learning more about either one or a number of occupations have and can be readily implemented. Moreover, understandings about how these capacities can be developed clearly suggest the type, duration and sequencing of experiences that are most likely to develop the kinds of knowledge required for occupational practice including the development of the strategic forms of those capacities. In addition, much is also known about how to promote the learning of vocational knowledge within practice settings and to utilise these contributions most effectively. Concepts of workplace learning and guided learning at work assist understandings about how to enrich these experiences. Then, there is enormous potential that can arise from having teachers who are skilled in both their content expertise as vocational practitioners and also as effective teachers of others. These teachers' capacities also can extend to how best to organise and integrate students' experiences in practice settings so that all stand to secure rich learning outcomes. So, there is a significant role to be played and discretion to be exercised by those who teach, instruct and otherwise assist the development of students' capacities. In sum, those who organise and enact the experiences students need should possess the capacities that permit them to perform effectively in their work and also have the discretion required to make decisions associated with the enactment, monitoring and evaluation of vocational education provisions. Therefore, not only does discretion need to be afforded to those who teach and otherwise assist learners but also the development of their capacities to undertake these activities effectively, and in ways which meet the kind of learning goals that are to be addressed and with particular cohorts of learners. That is, they need adequate preparation and the ability to practice in ways that can secure those outcomes for learners.

Moreover, it is now also clearly understood that the process of learning is very much premised on engaging with learners (e.g. students, apprentices and workers) and finding ways of identifying and meeting their needs. Therefore, it is necessary to capture and utilise accounts and measures of students' interests, readiness and bases by which they participate in and learn through vocational education provisions. Ultimately, as noted in Chapter 6, these individuals are not just the object of vocational education; they will also enact occupational tasks as their paid work and find their vocations in that work. Their learning and development is at the heart of vocational education provisions and it cannot effectively progress without understanding the bases by which they will participate in and learn through these provisions. It is these learners that exercise discretion, perhaps increasingly, about how and what they engage with what is afforded them through educational provisions. It is also their capacities that can assist enterprises to secure the kinds of outcomes they want through employing them and, thus, ultimately contribute to national, social and economic well-being.

Consequently, a message here is that it is important that the curriculum provision and outcomes be informed by what is known about these matters, that those who teach and otherwise assist individuals in learning occupational knowledge be given an adequate role and discretion to fully realise the potential of vocational education provisions and that those provisions be informed by the perspectives, interests and readiness of those who learn. It is not sufficient to assume that the powerful external voices that have shaped the provision of vocational education will be adequate without due discretion being acknowledged and exercised by both those who implement and those who learn.

Towards an Effective Provision of Vocational Education

Following from the above, in this concluding chapter, consideration is now given to how vocational education might best proceed (i.e. the ideal curriculum). It is proposed that decision-making about vocational education needs to be far more distributed and that key decisions about content, objectives and processes need to be made by those who teach, not only by those who speak on behalf of interests external to vocational education. Further, a more situated set of concerns and requirements needs also to be considered within the approach to curriculum development for vocational education both as a field and a specific sector. Going beyond the canonical, it is important to understand how an occupational practice is enacted and this can best be understood and supported at the local level (i.e. in the places where work is practised). Moreover, beyond enhancing the discretion of those who teach, and those who provide experiences in practice settings, it is also suggested that a consideration of the capacities and interests of those who are positioned as learners is also essential. In short, what is proposed here is a mapping out of how vocational education might best progress. It argues that understandings about and practices for the vocational education field, and the sector and the institutions that host and support it, and the relationships among them are now mature enough to promote the exercise of discretion and professional capacities. It is suggested that there should be a rolling back of tight bureaucratic control and the dampening influence of socially privileged others so that vocational education institutions and educators can take greater control over the provision of vocational education. That is, they should be provided with the kind of discretion that will permit them to understand both the needs of their students and the workplace settings that vocational education programmes need to serve in order for appropriate, focused and targeted approaches for the development and enactment of educational provisions. While meeting the needs of learners in this way, it also can meet the needs of the workplaces that graduates are likely to work in as well as developing the canonical knowledge required for their particular occupation. It is these kinds of capacities which appear to be at the heart of what constitutes an effective provision of vocational education.

In many ways, what is proposed here and now is what constitutes the 'ideal curriculum' or what should occur from a scholarly perspective (Glatthorn, 1987). The claims about what should be emanate from the discussions that have been advanced

across this book and the body of scholarship which informs those discussions. Yet, what is being proposed should not be seen as being hopelessly idealised. Instead, it is founded on well-established concerns about educational programmes needing to be adequately informed in terms of purposes, processes and intended outcomes. Indeed, much of what is proposed here is evident in vocational education and training systems which can be characterised as being mature enough to exercise more educational leadership than they have been warranted in some countries. That is, rather than strong centralised control which seeks to manage and reduce the discretion of teachers and others who assist learners, these systems are concerned with identifying industry and occupational level requirements, the circumstances in which those requirements manifest themselves as performance measures within employment and ways in which they are aligned with the readiness and capacities of those who participate in these programmes as students.

The Ideal Curriculum as Pathway

As outlined in Chapter 7, a curriculum is constituted by a pathway of experiences for the learners to progress along and achieve their goals. Yet, these pathways have quite different destinations and tracks. There is one pathway that helps individuals decide about the particular occupation that they should pursue – i.e. a pathway to select an occupation and decide how to proceed. As well there are pathways associated with developing capacities to engage in the selected occupation – i.e. pathways for entry into that occupation; and also pathways of development during working life to sustain employability – i.e. pathways within working life about secure ongoing development. Yet, even these three kinds of pathways will be distinct for particular individuals and engaged with in quite different ways by them. That is, their personal needs, readiness and intentions are central to what motivates them to engage with and progress within vocational education. When considering the range of purposes that were outlined in Chapter 4, there is clearly a need for diverse kind of pathways. Many individuals follow the pathways that have been set down by others, to learn from them and take the knowledge which they have and apply and advance it through their own work. There is also a linear pathway which individuals will need to engage with at different points depending upon their readiness and intentions. For instance, one of the first parts of this linear pathway is for individuals to identify the particular occupation in which they are interested and to which they are well suited.

Pathways Towards Occupations

The first kinds of pathways comprise those that assist individuals in identifying which occupations are aligned with their interests, capacities and expectations. As noted, selecting an occupation can be one of the most important decisions an individual takes (Rashdall, 1924). In many ways, these decisions commit individuals to

particular courses of activities in which they will make significant personal investment. As well, this decision is also often accompanied by a societal investment in their education and workplace experiences. Hence, when individuals withdraw from or otherwise fail to complete their initial occupational preparation, or leave the occupation shortly after completing their preparation, there is significant personal and societal cost. This pathway is also that often taken at the important transition from school to work and at a time in which young people are seeking to identify themselves in some way. It also leads to a usually protracted process of securing (i.e. learning) the capacities to practice that occupation, albeit through educational provisions, the workplace or a combination of the two. Consequently, before individuals select their preferred occupation, it is important they are provided with pathways that will assist them in making judicious decisions about occupations on a well-informed basis. Such a pathway might expose learners to something of the range of occupations that exist and try to identify those that meet their needs, capacities and readiness. Of course, given the range of potential occupations, it is wholly improbable to be able to provide students direct experience of all of them. However, curriculum and pedagogic practices could be enacted to deliberately engage students, perhaps still while at school, to consider a range of occupations and provide means by which they might come to select a particular one. Even if this process were simply to vicariously experience a range of occupations throughs texts and images, it would still require processes that could engage students in considering the kinds of occupational choices they could make.

Further, when individuals have identified particular occupations, it would be helpful to provide experiences of occupations so that their decision-making could be informed on the basis of experience and understanding about what constitutes that particular occupation. This would include what is required for the occupation to be practised effectively and what it actually entails on a daily basis. This experience seems important given the high attrition rate experienced in many countries both during the training for and the initial engagement in occupations. For instance, in a study referred to within this book, student nurses articulated their reasons for wanting to become nurses. Yet, many of these reasons were premised upon ideals and potentially false concepts about what constitutes nurses' work and why these students believed they were well suited to it. Nursing is obviously an apposite reference here: many people would claim to understand what nurses' work is all about, and in particular, are drawn to this as a desirable and worthwhile occupation. While its worthiness is not disputed here, the very high attrition rate within nursing indicates that either novices' conceptions of the work are quite erroneous or that individuals have misaligned their interests and capacities with its requirements. Although a range of situational and societal factors (e.g. unpleasant working conditions, bullying and mismatches) impact upon whether individuals remain in an occupation, clearly, their own understanding of the occupational field also plays a significant role.

It follows, therefore, that the pathways that comprise vocational education provisions need to assist individuals in making informed choices about their preferred occupation and becoming prepared for that occupation needs to expose

learners to the requirements of the work and what constitutes its practice, what is needed to enter the occupation and the long-term prospects for advancement and employability.

Pathways for an Occupation

Having identified and, perhaps, had some initial experience of a particular occupation, individuals require a curriculum to be organised in ways which assists them in learning the kinds of knowledge that they will need to be effective and competent workers. It is these kinds of capacities that will most likely lead to effective and fulfilling engagement, and such engagement is the kind through which individuals' sense of vocation most likely arises. So, experiences that are generative of these capacities are needed in both educational institutions and practice settings when constituting a pathway along which students progress to develop the required kinds of capacities.

It is likely that such a pathway would need to provide opportunities for learning about specific occupational tasks and the procedures for undertaking them as well as the opportunities for practising and honing those procedures. Moreover, opportunities to observe how activities are undertaken with an occupational practice and how those activities fit within the overall sphere of work in which they are utilised are likely to be helpful for developing the potential for using such capacities in an adaptable way. That is, if the context for the required performance, how it might be enacted and its relationship to workplace goals are all understood, then there are bases for adapting that information to other circumstances. Although that pathway is often seen as having an endpoint when an individual becomes recognised as an occupational practitioner, other pathways then emerge. Some of these pathways continue the linear progression and individuals will carry on along them to become more competent or recognised at a higher level of occupational classification (e.g. expert worker, advanced skilled tradesperson or professional). This is the kind of pathway that is often set out in national qualification frameworks and sometimes comprises a hierarchy of knowledge to be learnt and/or certification to be achieved in order to secure access to and then progression within the occupation. However, moving up the hierarchy within occupational fields may or may not be easy to realise (i.e. nurses becoming doctors or dental assistants becoming dentists) and may or may not be appropriate to many of the circumstances in which individuals work. As well, not all forms of work have such hierarchies. Moreover, there can be considerable barriers to progression when there are such hierarchies. Indeed, in some countries, the educational systems do not permit or facilitate upward articulations within a framework of qualifications that transcend different sectors of education (i.e. vocational and higher education). There are alternatives to linear pathways. For instance, some pathways are across a range of cognate occupational areas so that an individual becomes skilled in a number of related areas, sometimes referred to as being multi-skilled. Or, alternatively individuals' work can be applied across a

range of different occupations (e.g. clerical work). Other pathways lead to different occupations or developmental trajectories.

In addition, many workers will find either a need or have a desire to change occupations across their work life history. Therefore, they progress along a different kind of pathway which assists them in learning occupations that are new to them. This progression may see them engaging in an initial preparation programme or some truncated pathway towards being accepted as a skilled worker. For instance, many individuals working as vocational educators have themselves taken such a pathway through participating in a teacher education programme focused on vocational education, after a long time working in their initial occupation. Yet, the nature of such pathways are likely to be quite distinct between those who are intentionally seeking a change in their work and employment (and who have the kinds of social capital (e.g. qualifications and resources) that will permit them to achieve it) and those who have an involuntary need to acquire a new occupation. Hence, the ideal curriculum for vocational education should comprise a pathway of opportunities and experiences that constitute the pathway towards entry into the selected occupation, and then pathways that provide a breadth of experiences for developing depth within a specific occupation and also articulate to higher-level qualifications and outcomes.

Consequently, vocational education needs to organise the kind of pathways that provide experiences to

- illuminate the nature of a range of occupations;
- assist individuals in identifying what occupations they are drawn to, and why;
- provide experience of those occupations so individuals can learn more about them;
- develop the capacities required to be effective to initially participate in an occupation;
- generate informed and critical perspectives about occupations to promote adaptability and utility;
- assist individuals in developing greater breadth of understanding about their occupation and associated fields;
- provide support for maintaining the capacities to be effective within an occupation across their working life;
- assist individuals in identifying pathways to new occupations;
- guide individuals in making transitions to different occupations; and
- assist transition in moving out of working life.

Such a set of experiences does not mean that these have all to be established by educational institutions and educators. Instead, they comprise pathways that individuals can move along, some with necessary barriers, checks and certification, others which may be more self-negotiated. Within this framework, there will be personal pathways that individuals will negotiate as they (i) identify what occupations appeal to them, (ii) seek to secure entry into those occupations or the educational provision supporting them and (iii) then make progress in those occupations across their working lives. Such is the range of different levels of readiness that individuals have

to decide about occupations, engage either directly in that occupation or educational provisions preparing for them, secure the kinds of work that they have prepared for and then progress in and change with that work, so that these pathways will become quite individual and, in many ways, unique. This constitutes, in many ways, the personal curriculum that leads to, is exercised within and across their working lives.

Yet, beyond the provision of experiences for learners (i.e. curriculum), there are considerations of how best these experiences can be enriched. These are the pedagogic practices of vocational education.

The Pedagogic Practices That Support Vocational Education

The requirements to enrich learning experiences through the selection and enactment of appropriate approaches and strategies are essential for an effective educational provision. Factors such as the different kinds of learner needs and readiness that comprise students within vocational education, their distinct goals and trajectories and the need to develop a range of knowledge to be effective in their occupational practice (some of which is quite difficult to learn), all point to the need to support and augment students' experiences pedagogically. It is noteworthy that countries with the most highly esteemed and seemingly effective vocational education systems give considerable primacy to the qualities of those who teach. For instance, in Finland, Switzerland, Germany and Austria, those who teach in vocational education systems have higher-level pedagogic qualifications on top of their content knowledge. In contrast, in some countries, the development of these capacities is seen as only being required at a very low level, if at all. This is often the case with higher education in particular. However, in recent times, there have been efforts in some countries with vocational teacher education provisions to downgrade the standing of vocational education teachers and their qualifications. Australia and the United Kingdom are two such cases. Many other countries also give significant attention to the development of vocational educators, which by degree is mandated, although many do not. Moreover, there are processes for recognising not only the content and pedagogic competence of teachers in vocational education institutions but also the contributions of the workplace and the necessity of enriching learning there. So, in Germany there is the *Meister* who is recognised as being competent to assist the development of occupational knowledge for apprentices in the workplace. It is also noteworthy that in high-status occupations, considerable attention is given to content experts assisting in the development of novices' occupational knowledge and then supporting further development across working life. Perhaps medical education stands as being an example of this, albeit under considerable pressure because of the demands of clinical practice. Hence, innovative approaches to providing a range of experiences for students are being developed across the field of medical education, including models that provide experiences across metropolitan and rural centres, between general and hospital practice and also different kinds of rotations within the standard medical educational model within hospitals. So, in that professional field, considerable attention is being given to finding ways of

improving students' learning experiences. Elsewhere, it is seen that standard, unitary and national models is what is required.

It is also noteworthy that in the German tradition, discipline-specific pedagogies have been developed. That is, sets of instructional practices and techniques have been identified that are seen to be appropriate and effective for learning particular aspects of occupations. Vocational teacher education there is very much premised on securing didactics that are aligned to each occupational area. Moreover, in that country, there is a tradition of aligning the teaching of particular disciplines with particular pedagogies. So, some universities concentrate on preparing business educators, others engineering educators, hospitality educators and so on. Hence, there are strong traditions that associate the learning of particular occupations (i.e. content) with specific approaches to learning. It is worth noting that this is also the case in primary and secondary education and particularly in specialist areas, such as in science education. Consequently, regardless of whether a discipline-specific pedagogy is required or is feasible, in countries with a strong commitment to developing skilful knowledge and also occupations where the development of this knowledge is seen to be crucial, considerable attention is given to the quality of teaching and the kind of pedagogic strategies that are likely to develop the knowledge required to practise. All this suggests that there is an important role for vocational educators and the adoption of appropriate pedagogic practices. Moreover, much of the understanding about how robust (i.e. adaptable) knowledge can be developed suggests that although learners' experiences in education and practice settings are an essential component of developing that knowledge, on their own,s they are not sufficient. What is required are more experienced partners (i.e. teachers and workplace peers) who can draw out meaning, assist learners in making links with what they know and how this applies to the ways in which they need to understand and apply knowledge in circumstances that are different from those in which it was learnt. It seems that although little of this knowledge can be directly taught, its development can certainly be prompted, guided and supported by individuals with the capacities to achieve this goal (Rogoff, 1990). Indeed, studies of the development of expertise while emphasising the kinds of experiences required are also quite explicit about the importance of the role of experienced others in assisting that learning (Ericsson & Lehmann, 1996). There is no need for learners to engage in the epistemological adventures of Robinson Crusoe in inventing the knowledge that is already known about and has arisen through history and culture, as this is a potentially unhelpful and unproductive means of learning. Instead, engaging with partners who understand that knowledge and can perform the kind of work procedures individuals are learning can provide opportunities for observation and modelling as well as close guidance. One of the great geniuses of humanity is our capacity to pass on understandings and practices across generations which removes the need for each generation to engage in these kinds of adventures. Instead, each generation builds upon the knowledge of those who have developed and utilised this knowledge over time.

However, students need to engage in their own and intentional epistemological adventures in learning that knowledge, not just through just didactic teaching. Instead, learners need to engage intentionally and effortfully in constructing this

knowledge. Therefore, the pedagogic processes need to position learners as the meaning makers and guide their processes of meaning making in ways that includes a consideration of the knowledge which has been developed over time through practice and refinement. Hence, the importance of guiding the development of novices through engaging them in activities which incrementally expose them to more demanding learning tasks, whilst providing experiences that make accessible for them the knowledge to be learnt through modelling, demonstrating, coaching and using strategies of explication to make accessible knowledge which is hard to learn. All this points not only to the need for adequate preparation for vocational educators, but also an important role for them in the vocational education project per se.

It follows, therefore, that the provision of experiences that are likely to lead to the development of effective occupational knowledge and those associated with making it robust are likely to be dependent upon individuals who have the particular set of skills to realise this goal. These are, in some ways, highly specialised capacities, just like those that underpin the other occupations for which individuals are being prepared. These are not the kind of capacities that can be captured within documents, passed on and down by industry stakeholders. Rather, they need to be understood and enacted in the circumstances and localities in which students are engaged in learning vocational knowledge and practice. Such a suggestion indicates that not only do those in workplaces require some pedagogic preparation, but those working in institutions such as universities where staff may not be required to have pedagogic preparation may well also be in need of such learning experiences. This would enable them to develop further their capacities to effectively augment experiences in practice settings and maximise those provided through educational settings.

Not only then is there a need to grant discretion to those who teach and otherwise assist vocational education students in learning, we also need to ensure that these individuals have the kinds of capacities to organise experiences in educational practice settings that can enrich students' learning. Such discretionary capacities includes being able to make decisions about how best to formulate at least some of the educational goals, organise and enact experiences for students and then enrich those experiences through the selection and use of pedagogic strategies that are well aligned to the particular educational purposes that are being achieved. Their capacities extend to understanding the ways that procedural, dispositional and conceptual capacities can develop through the use of combinations of particular curriculum and pedagogic strategies. In turn, these are likely to be generative of the kinds of knowledge that students need to develop specifically, and, overall, the kinds of capacities required to effectively practise an occupation. Consequently, it is proposed here that rather than a curriculum process being managed and regulated by those external to vocational education, there is a strong case for equipping and empowering those who teach and otherwise assist students to learn to take their place.

However, beyond advancing vocational educators' discretion and capacities to organise learning experiences and then augment these through the use of particular pedagogic approaches, there is also a need to engage and equip students to be effective learners, that is, promoting and engaging their personal epistemologies.

Students' Personal Epistemologies: Their Engagement and Promotion

Throughout the discussions within this book, it has been repeatedly emphasised that it is the learners who are sovereign. That is, ultimately it is how they engage with what is afforded them and decide the degree of effort, intentionality and focus of that engagement that they will determine the richness of their learning. They also are the ones that assent to an occupation becoming their vocation. As noted above, there has been a long tradition of often powerful and privileged others making decisions about the standing of the occupations that the less powerful and privileged do and the means by which preparation for these forms of work should proceed. Indeed, many of the current manifestations of vocational education are premised very much on achieving what others decide to be the goals for this educational provision. However, these can only ever be intents because it is learners who elect how they engage with and make sense of what is provided and decide whether the intentions of others will be realised or not. Therefore, the means for understanding the needs and readiness as well as ways of engaging with learners become an essential component of the vocational education provision. At its most limited conception, this suggests that the needs and readiness of learners need to be understood and that these factors will need to be considered when teachers and others who support learners organise learning experiences. Certainly, the curriculum and pedagogic practices that are enacted will require to be informed by those needs and readiness. But, far more important is the imperative to engage learners and to foster their agency. In reflecting upon three decades of research into the development of expertise, Ericsson (2006) concludes that perhaps the greatest contribution comes from individuals themselves. Indeed, he refers to learners engaging in deliberate and effortful practice and rehearsal as 'deliberate practice'. This comprises a personal practice and sets apart individuals who engage in it as being highly proficient at what they do and distinguishes them from those who do not engage in this kind of intentional learning activity. That is, individuals who engage actively and intentionally with the deliberate goal of improving their knowledge are far more likely to develop the attributes associated with experts. Again, these attributes are not something which can be achieved just through teaching. It is very much dependent upon the learners' personal epistemologies. These epistemologies go beyond personal beliefs about values associated with knowledge, learning and participation in experiences from which they will learn. More fundamentally, they comprise individuals' ways of knowing, how they construe and construct what they experience, and their existing capacities and values. All of this is central to their engagement in effortful learning.

Individuals' personal epistemologies are shaped by their agency and intentionalities. Moreover, beyond initially learning about an occupation and the interest and capacities (i.e. readiness) to engage in that kind of learning, there is also a need for individuals to continue to learn throughout their life and throughout their working life to maintain their employability. Hence, the agency of learners and how this is directed towards engaging with others and artefacts to initially learn and then to continue to develop occupational knowledge is quite central to vocational

education. Not the least of this is that many forms of knowledge that are required for contemporary work are hard to learn. That is, they comprise highly developed and interlinked procedures, as well as associated understandings, many of which are becoming increasingly difficult to access because they are symbolic and conceptual in part. However, none of this development can take place unless individuals are keen in their intent and effortful in their application. A particular concern for vocational education is that one of its key outcomes should be that individuals will have the capacity to continue to manage their own learning across working lives, albeit in the company of other workers or in processes of learning and transformation with them. That is, an important quality will be for workers to actively monitor their performance and identify ways and means in which they can sustain that level of performance through intentional and focused learning experiences.

Therefore, because of the importance of individuals' personal epistemologies in the initial learning of their occupation and then its ongoing development across their working lives, vocational education provisions must consider how best it can assist individuals in developing these capacities to be lifelong intentional learners. Importantly, rather than assuming that individuals may well develop these capacities through everyday practice activities, it is likely to be helpful and appropriate for vocational education provisions in places such as colleges, schools and universities to intentionally prepare individuals to manage their own lifelong learning and to equip them with the capacities to do so.

So, again more than the necessity to consider the discretion which learners will exercise, it may well also be very important to assist them in developing the kinds of capacities which will allow them to be effective in their initial engagement with the occupation, to participate effectively in practice settings and to develop the capacity to maintain their skilfulness and employability across their working lives.

Vocational Education in Prospect

In conclusion, it has been proposed through this book that vocational education is an essential although sometimes undervalued field of education. Its contributions across human history inevitably largely predate and are of greater influence across a broader population than probably any other form of education, albeit largely enacted within a family and/or local business. However, because of societal privileging and cultural bias, as well as the activities of powerful elites of different kinds, the field has never really been granted the full legitimacy that it deserves. The consequences of these views is that vocational education is often been seen within the public and scientific discourse as being narrow, instrumental and directed towards individuals of low ability and prospects. Consequently, its full potential and its place amongst other fields of education and contributions have been more limited than what they might have been. It has been argued here that vocational education is central to individuals coming to claim occupations as vocations. It also contributes to lives in which individuals can realise themselves not only through their life outside work but

also through work. Moreover, the contributions that vocational education has, does and can make to generating the kinds of capacities which human cultures require and societies need is essential to the continuity and progress of the human species and what we take as being expectations for human existence, that is, the provision of shelter, sustenance of different kinds and the kinds of goods and services which enrich human life and provide the kinds of needs expected in contemporary times. Societal sentiments and norms, whilst being enduring, can change and transform. For instance, the ways in which occupations and vocational education are held remains different across societies and communities because of particular social and historical movements. Consequently, there is every prospect that vocational education can realise its legitimate and full role within and across societies and be seen as being as worthwhile as other fields of education. Yet, such an outcome is unlikely until those who organise, enact and engage in this field of education are themselves granted legitimacy in forms of discretion and professional autonomy and have the range of capacities to effectively generate, implement and engage in experience effectively.

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