Chapter 6
Key Findings About Integrating Experiences

6.1 Progressing the Integration of Experiences in Practice Settings

From analyses of the processes and outcomes of the 25 projects across the two teaching fellowships outlined in the previous chapter, it is possible to identify key findings that can inform how to effectively organise and enact education provisions that include and seek to utilise and integrate practice-based experiences. These findings are presented as suggestions to identify how best higher education students can be prepared so they are able to effectively practise their preferred occupation upon graduation. It also anticipated that such a preparation can extends to developing the capacities that will assist them to sustain that efficacy as they practise and continue to realise their personal and professional goals across lengthening working lives. The findings from the two fellowships are advanced here as a set of eight broad findings that are the subsequently presented in more detail and specifically in the three subsequent chapters focussing on curriculum (Chap. 7), pedagogy (Chap. 8) and personal epistemologies (Chap. 9). Importantly, while summarising the contributions of these projects, the findings also stand as a useful set of foundational principles for the planning, organisation, and enactment and evaluation of higher education provisions that seek to provide students with experiences in practice settings and then integrate them within their university programs.

In overview, these key findings are as follows:

1. Just having workplace experiences is insufficient: those experiences need augmenting
2. Preparing students for, supporting during and assisting connect experiences after the practicum experiences is important
3. Students' readiness (i.e. interest, realism, capacities) is central to how they participate and learn

4. 'Time jealous' students present particular challenges in providing and managing educational experiences
5. The 'experienced curriculum' (i.e. how students construe and engage) is becomes central
6. That incremental exposure to practice-based experience and progression is preferred (i.e. a series of experiences being built upon, different levels of support over time)
7. Educators' conceptions of worth and competence with practice experiences are likely to be diverse and influence teacherly support
8. The importance of aligning all parties' understandings of purposes of WIL and its processes

Each of these propositions are presented and discussed in turn below.

6.2   Just Having Workplace Experiences is Insufficient: Augmenting the Experiences

The findings of the fellowship projects indicate that just providing students with or engaging them in workplace experiences alone is insufficient to develop the kinds of capacities needed for them to achieve the required educational goals. Instead, it is necessary to augment these experiences for students in ways that enrich them, promote their applicability and strengthen their outcomes for students as learners. Below it is proposed that the augmentation of experiences is associated with: (i) mediating novel experiences and avoiding dissonance; (ii) promoting applicability through making links and reconciliations; and (iii) supporting the reconciliation and elaboration of the knowledge to be learnt. Each of these forms of augmentation is now discussed.

6.2.1   Mediating Novel Experiences and Avoiding Dissonance

The enrichment of students' experiences in workplace settings can likely occur through teacherly interventions and activities before, during and after the students' experiences in those settings (e.g. workplaces). Preparing students for these experiences, including their active engagement within those settings and supporting them during that time and activities within practice settings and then utilising those experiences after they have been completed, stands to enrich the learning potential of these experiences. Without these interventions and engagements, the worth of these experiences is potentially quite limited, and even potentially counter or non-productive. In essence, this teacherly mediation is about extending the scope of the students' zone of potential development (Valsiner 2000). That is, the scope of the learning that can arise through their own energetic efforts. To press them beyond

what is the scope of how they can apply what they know, can do and value requires guidance by more informed partners to be effective. This is sometimes referred to as extending the zone of proximal development, as attributed to Vygotsky. For instance, a positive experience in the workplace can be strengthened by having opportunities to identify bases of that experience and what led to satisfactory outcomes for students. Even when students have had unsatisfactory or negative workplace experiences, utilising those experiences in educational ways through intentional pedagogic activities can achieve productive outcomes. This intervention extends to those that are peer-led. Alternatively, even positive experiences can be augmented to realise stronger outcomes. Further, if students have negative experiences and these are not adequately mediated, the outcomes can be dire.

When students participate in practice settings, often they will be engaging in experiences that are novel for them. That is, quite different from what they have encountered before or within their university programs. Such experiences are likely to make particular kinds of demands upon them and stand to shape what they learn in particular ways, depending upon the specific activities and interactions in which they engage. As higher education students are engaged in the process of coming to understand and identify with a particular occupation, this experience may be quite counterproductive if the demands and challenges presented by both sets of experiences seem misaligned and taken as being contradictory and unhelpful. Students might experience high levels of dissonance in encountering and experiencing an environment and activities that are unfamiliar to them, for instance. Such an experience is unlikely to lead to the development of a coherent and actionable body of knowledge. Moreover, as Hodges (1998) suggests this dissonance can lead to dis-identification with the selected occupation. More widely, it seems many student nurses (Newton et al. 2009a) and teachers and others withdraw from their courses after negative practicum experiences. Indeed, these concerns were central to student-centred learning circles being used for social work students in the first of the two fellowships (Cartmel 2011). The impetus here was to both prepare and support these students in the event that they encounter confronting experiences during that practicum experiences.

6.2.2   Promoting Applicability Through Links and Reconciliations

Indeed, it is quite likely that, in many workplaces, interventions will be required to assist students understand the applicability of what they have learnt in educational programs and how this relates to the aims and goals of their courses. Taking the opportunity to maximise these experiences and direct students' considerations of them towards what is the intended focus of their learning can be helpful. For instance, as elaborated in Chap. 8 (i.e. Pedagogic Practices Supporting the Integration of Experiences), strategies making explicit links between practices

of the work settings and what is being proposed within their courses can assist students develop richer understandings than if they are merely left to reconcile these experiences without guidance from others. Issues of confidence, being confronted, not understanding the relevance of what is experienced, and struggling to find alignments with their studies are all issues reported by students within these projects. So, more than locating and providing students with experiences in work settings, the findings suggest that for the potential of these learning experiences to be realised, it is necessary for there to be interventions to make explicit and promote the applicability of what has been learnt from experiences in workplaces, which is sometimes referred to as maximising teachable moments (Bailey et al. 2004). These interventions extend to reconciling the two sets of experiences for the students and drawing out meanings and procedures which may not be learnt through merely placing students in workplaces or practice settings.

6.2.3 Supporting the Reconciliation and Elaboration of Knowledge to be Learnt

It is likely to be helpful to actively strengthen students' learning outcomes from their experiences by assisting them reconcile what they have experienced in both kinds of settings (i.e. those in the academy and workplace) and advance their knowledge accordingly. This strengthening goes beyond simply trying to unravel those experiences and make links with what the students have encountered in practice settings. It also applies to those within the educational settings. For instance, as noted above, this augmenting of experiences relates to assisting them understand what actually constitutes the occupation in action and how that enactment can differ widely across a range of practice settings. Moreover, it can furnish opportunities for students to consider and reappraise conceptions of their selected occupation and how they should come to engage with and learn about that occupation. In one project, many of the students had to confront the strengths and limitations of two distinct philosophies associated with the enactment of a particular occupation (Chiropractic project). These characteristics were discussed in terms of the relative worth of periodic interventions for assisting individuals' health in a remote and impoverished community (i.e. a stateless community in northern India). The opportunity provided for chiropractic students to discuss the merits or otherwise of engaging with these community members in assisting their health for a restricted period of time (i.e. 2 weeks) gave rise to not only an elaboration of two distinct philosophies about chiropractic work, but also the opportunity for the various merits of those philosophies to be appraised by the students. Subsequently, fundamental issues about what constitutes worthwhile chiropractic work were discussed using this example which many of the students had actually experienced. This discussion brought together the distinct philosophies of that occupation's practice.

All of these three sets of factors suggest that it is insufficient to merely provide students with practice experience, or that students should independently locate and engage in that practice experience, without support and guidance. Instead, it is important that these experiences are engaged with and augmented through their organisation and sequencing (i.e. curriculum practices) and then enriched through pedagogic practices as part of the overall educational provision. Rather than seeing these experiences as being largely extracurricular (i.e. outside of the intentional learning experiences) they need to be seen as being an essential element of it and treated accordingly. Whether referring to social work students who are being prepared for confronting work circumstances, chiropractic students debating the worth of interventions to address community members' health-related issues, or teachers having the opportunity to consider a range of schooling circumstances, there is a need to augment those experiences. Without these kinds of interventions, the learning potential of the experiences of those students is likely to be quite restricted and, in certain circumstances, could be deleterious. For instance, individuals having negative experience might withdraw or come to see and practice the occupation from restricted and unhelpful viewpoints.

6.3   Preparing Students for, Providing Support During and Assisting Connect Experiences

Following from the above, a key finding from across nearly all of the projects was the importance of: (i) preparing students for their work experiences, (ii) supporting them during those workplace experiences and (iii) then organizing activities after their work experiences for the sharing of those experiences with other students and also connecting the outcomes of those experiences with their program's goals. These three important findings are now set out here in preview.

6.3.1   Preparing Students for Their Work Experiences

Many students had no or very limited access to or experience of their selected occupation in practice. Hence, these experiences can provide a greater understanding of what these occupations comprise in practice. Also, in many cases, because of their lack of understanding, students often approached their practicum experiences with concerns, anxieties and feelings of being unprepared for performing in those settings. This was perhaps never more the case than when students are being assessed on their performance in practice settings by practitioners or when asked to engage in activities which are quite unknown to them. They were aware that, unlike the relatively private nature of student assignments, that there would be a

public dimension to their performance and through which perceived or real failure to perform could have a high personal price (e.g. practice teaching). For instance, physiotherapy students were concerned about both what their supervisors might say and make judgments about their performance, but also how they would perform when they actually had to 'put hands on patients' for the first time.

Consequently, finding ways through which students can be adequately prepared and advised about the requirements for their practicums or other forms of workplace experiences is important. This includes them being prepared with the procedural capacities they need to be effective in those tasks and about the kinds of issues they are likely to face, which are helpful in informing the requirements for a productive initial engagement.

6.3.2 Supporting Them During Those Workplace Experiences

Moreover, finding ways of supporting students during their practicum, particularly if they are long-term placements, is likely to be helpful in building their confidence and capacities, specifically when they initially engage in that work. These interventions may be important even in what seem like situations where plenty of support and guidance is available. For instance, student nurses report feeling isolated in busy hospital wards. Therefore, student-led discussion groups were piloted and taken up enthusiastically by these students (Newton et al. 2009a). Then, there is the provision for sharing experiences, through which to learn from others that can also be supported by teachers' interventions. This support can comprise arrangements made within the workplace, such as the provision of mentors, preceptors or supervisors who will support students and organize appropriate experiences for them and monitor their development. That support can also comprise organizing opportunities for students to meet during their practicum periods, either through a teacher-led process or one that students engage in and manage independently (Newton 2011). In particular, these kinds of experiences can provide the opportunity for peer support and collaborative learning activities through sharing, discussion and reconciliations.

Even in the most people-intense environments (e.g. hospital wards), some students reported being isolated and lonely and wanting to engage with their peers to discuss what they have experienced and are learning. This kind of peer support can be useful when students have had to confront difficult or demanding situations that are quite novel to them and they are not in a position to have developed confidence within the workplace setting. Also, because they are often peripheral participants (Lave 1991), they are prone to be engaged with minimally. It is the engagement with peers or their teachers that can well provide this kind of support which might be otherwise lacking. So, mechanisms that can support students during their practicum are likely to be welcomed and assist the development of the learning about their selected occupation.

6.3.3   Organizing Activities After Their Work Experiences for the Sharing of Those Experiences

Furthermore, after completing their practicum experiences, having the opportunity to engage with other students, to discuss, share, compare and contrast experiences and draw out meaning from them is likely to be helpful, for the reasons raised in the above section. Not the least here is the importance of students understanding something of the variations in requirements for work across different workplaces where occupations are practised. If through interactions with other students they can come to understand some variations of the occupational practice, the different kinds of goals that are seeking to be achieved and the different means of securing those goals across a range of professional settings and for what particular distinct set of reasons they are appropriate for their circumstances, can lead to the development of rich and applicable occupational knowledge. Both the knowledge of a range of goals and practices for each occupation and that there are variations in practice provide a foundation for students to understand that what they experience and are encountering is not the one and only way the occupation is practised. In particular, it may help them understand more readily the kinds of occupational practices that they will encounter beyond graduation. This is because these practices might be quite distinct from those they have experienced themselves in and through their initial occupational preparation program. Certainly, the need for re-engaging and utilizing fully those experiences were recognized early in higher education provisions that involved extensive periods of work experience. For instance, as noted in earlier chapters, from early on in the cooperative education movement in the United States it was understood that there have to be a specific opportunity for students to come together and share their experiences collectively, but also have opportunities for making explicit links between what they have experienced in the workplace and their courses of study. These activities were referred to as the co-op seminar (Grubb and Badway 1998).

The particular educational aims and goals for these post practicum sessions can be of different kinds. In the Co-op seminars, there was great concern to ensure that the kinds of discipline specific concepts and practices that were being taught in the students' course were principal bases for understanding experiences in the students' internships. However, such processes can also be used to help students identify and address what comprises important education intents such as understanding what constitutes the canonical knowledge of the occupation (i.e. concepts and practices which are common across the enactment of that occupation), variations in the requirements of practice premised upon situational factors (Billett 2001) and the culture of practice (Brown et al. 1989). That is, how the occupation is practised in a particular setting or the practice of communities (Gherardi 2009). These activities can also be used to assist overcome difficulties that students face in understanding factors associated with the practice, as well as being supported and sharing with others difficult and confronting circumstances. For instance, in one project, journalism students reported having quite different experiences in the

same workplace setting (Journalism project). It was only through the opportunity to discuss that workplace with their peers that it was realized that many of these differences were not based on factors associated with the students themselves or their performance during their placements. Instead, workplace cultural factors distributed the different kinds of activities and interactions available to the students, including in this instance how they were distributed on the basis of student's gender.

In all, it is suggested that preparing students for workplace expectations can assist them utilize their experiences effectively. This is held to be essential for enriching those experiences through provisions of initial support before students engage in the practice experiences, during those experiences and then once they have been completed them. An indication of the importance of such peer support is that when they are not provided by the educational institution, students sometimes organize them (Richards et al. 2013). While this is helpful and is to be encouraged, these processes often also benefit from the kinds of insights that teachers can bring and also when structured in ways which are generative of positive and shared outcomes which can be engaged with by the largest number of students. For these reasons, when there was support from the educational institution, in the form of group processes in which students could engage with peers in sharing, discussing and deliberating about their experiences in practice settings, they were often valued and engage with by students (Cartmel 2011; Newton 2011). Consequently, it is suggested that these kinds of mechanisms likely need to be adopted broadly to support and enrich students' learning processes, not the least ensuring that the learning is productive, utilizes a range of experiences and is generative of outcomes that can assist students understand and practice more effectively their occupation within and beyond that course.

6.4   Students' Readiness Key Factor Shaping Their Learning

The level of student readiness to participate in practice-based experiences was identified as being particularly salient. Readiness refers to the capacities of individuals to be able to learn from the experiences they encounter. That readiness is found in what individuals know, can do and value. So, more than conceptual, procedural capacities, it includes how they elect to engage with what they experience. From the fellowship projects, the following findings about readiness were identified: (i) extent of foundational knowledge; (ii) student interest and agency; (iii) degree of realism and awareness; (iv) person-dependence; and (v) situational awareness.

6.4.1   Extent of Foundational Knowledge

In some accounts, readiness is seen as a quality that learners will obtain when reaching a particular state of psychological maturity. That is, having the cognitive capacity to comprehend and utilize the particular set of experiences that they

encounter. So, for instance, Piagetian developmental theories (Piaget 1976), the developing child moves through a series of stages and the extent of their cognitive capacities (i.e. how they think and can act) are premised upon their stage of biological development. Here, however, the concept of readiness is cast more broadly. It relates to the degree by which learners are able to engage with new kinds of experience and participate productively within them, thereby considering those experiences and adapting to what they know, can do and value, and securing rich outcomes through their negotiation of that experience. For instance, for the journalism student who, when confronted by a copy editor stating that the active voice and present tense is required in articles for press releases, their readiness is premised upon understanding the difference between passive and active voice and different kinds of tense. It follows that students' conceptual readiness to engage in these experiences is likely to be quite central to the quality of their learning.

It may well also be important for students to possess the kinds of procedural capacities (e.g. skills) required to perform tasks in practice settings. That is, they may have had to acquire particular capacities required to engage effectively or productively in workplace tasks in such settings. Given the diversity of potential experiences, expectations and requirements of practice, the task of securing this readiness may be as simple as providing a series of occupationally specific procedures such as sometimes occurs in clinical skills laboratories universities. Nurses and others engage in clinical laboratories to develop their procedural competence for standard occupational procedures (i.e. suturing, dressings, inoculations, lifting patients. etc.). Often, in those settings, there are experiences to assist student nurses rehearse conducting a series of procedures on patients using mannequins. However, the kind of activities students will be undertaking will probably differ and, therefore, the extent those capacities will be required might vary across work situations. Hence, the kind of educational goals that are being expected, as well as expectations of performance within practice settings will likely differ (Billett 2001). For instance, students engaging in practice-based experiences to orientate themselves to the occupation (i.e. what a nurse does) or some variations of it (i.e. what nurses do in different kinds of hospital wards) may participate in ways that engage them in less intense activities when they are participating to developing their procedural capacities (i.e. how nurses perform particular procedures with specific kinds of patients – taking blood from children, and adults). Regardless, the development of these kinds of capacities assisting these students be effective in the practice settings will likely be very important for students' readiness to be successful in their practice in those settings. That is, competence and confidence may be entwined here. Yet, in addition, there may also need to be other skills developed, such as the capacities to work in teams and inter-professional teams. The development of these capacities may require particular kinds of preparation (O'Keefe et al. 2011). It is often these kind of capacities that, whilst readily recognized as being important, sit somewhere between different courses and are not always easily able to be understood and effectively integrated through experiences in educational programs. Hence, these kinds of capacities likely need to be the focus of preparatory experiences to assist students are ready to maximize their readiness to engage effectively in their practice-based experiences.

6.4.2 Student Interest and Agency

Central to human learning is the extent to which individuals exercise their energy and interest and the direction of their intentionality when engaging in goal-directed activities and interactions as is required for conscious and effortful learning (Malle et al. 2001). It is these qualities that likely shape how new learning for students is achieved and the extent to which what they know comes to be applied, enhanced and extended. All of this is shaped by the learners' interests, agency and epistemological beliefs (Hofer and Pintrich 1997). Perhaps more than in most educational processes, students' participation in practice-based experiences are undertaken in a relatively independent way, and are therefore more based on their capacities and readiness as active learners, than when being taught (Campbell and Zegward 2015). This is because these experiences engage students in learning-related activities that are independent of those who teach and the kind of processes used in educational institutions with which they have become familiar and well-practiced. The degree of interest in students' selected occupations and their sense of self will likely shape the energy and level of engagement in the particular activities in which they engage in workplaces and, as a consequence, what learning will likely arise for them (Newton et al. 2009b). In this way, the readiness of students as learners will shape how that agency is exercised when engaging in learning through and from what they experienced in the practical experience. Ultimately, that learning will be shaped by what they already know, how they come to know and the ways in which they construe and construct what they experience (Billett 2009a). All of these factors are associated with their readiness in terms of existing knowledge, interest and the exercise of that agency. Students who are uninterested in the particular experiences they encounter in practice settings, or are distracted by other priorities or elect not to engage effortfully with what is afforded them in those settings, may not engage effectively, nor learn richly through the same set of experiences as those whose interests, capacities or understandings are more aligned with what has been experienced.

6.4.3 Degree of Realism and Awareness

Readiness also extends to being reasonable and fair about the processes and outcomes of such engagements: being realistic. Students may need to be circumspect about what they can achieve and manage, in terms of both their own expectations and those of others. On the one hand, there can be high levels of enthusiasm which might need to be moderated for students to engage effectively in practice settings. Students with unrealistic expectations about the scope of activities they can participate in or what they might learn through these activities may lead to difficulties with and potential frustrations in the practice settings, if they do not believe that needs are being met. On the other hand, there is also a need for

students to mediate and manage the kind of activities in which they engage and make judgments about what is beyond the scope of their developing capacities. For instance, in the midwife study, it was found that very inexperienced students were being given tasks to undertake (e.g. holding the baby's head on birth) which was probably beyond the scope in which these students could safely practice (Sweet and Glover 2011). Here, the two sides of being realistic are exercised. Firstly, it is important to be reasonable about the kinds of activities that students might expect to be engaging in, and also having the capacity to advise co-workers that such a task is likely to be beyond their capacity without very direct guidance from a more experienced co-worker. Indeed, such requirements might place students in positions in which they are uncomfortable. All of these personal bases for engagement emphasize the importance of adequate preparation, including briefings about what is the reasonable scope of activities and how students may need to be ready to negotiate these, as well as the importance of being realistic about what can be achieved by and expected of students in practice settings.

6.4.4 Person-Dependence

Students are not homogenous in terms of how they think, act and learn. They will have different levels of readiness in terms of what they understand, can do and value, and interest to do so. Within any cohort there will be a range of kinds and levels of experience, some of which will include occupational activities. For instance, in nursing programs, whilst many students are school leavers who lack nursing experience, they are also often nurses who have previously been nursing assistants or enrolled nurses and are progressing through to be fully qualified nurses. The two cohorts often have had quite different experiences (Newton et al. 2009b). Often, the former will have had success in schooling and approach their nurse education program with confidence that they have the capacities required to be successful as higher education students. However, they may be less confident about the tasks of nursing patients. Conversely, the enrolled nurses may have a lot of nursing experience, yet may be concerned about their capacities to meet the requirements of the university course, such as assignment writing. The latter may seek to demonstrate their competence in practical sessions and skills laboratory activities and in ways that attempt to compensate for the lower levels of writing skills. So, there may well be quite distinct kinds and levels of readiness to participate in higher education programs within the same student cohort.

6.4.5 Situational Awareness

These differences in readiness, as noted, may well lead to particular kinds of experiences being provided for particular groups of students, so that they can effectively participate in higher education programs, and practicum experiences.

One consideration is of how great or deep is the scope of their learning. For instance, in one project, where the focus was on students' learning about social work, there was a particular concern about the readiness of newly arrived overseas students (Social work project). Quite a few of these overseas students came from countries that do not have social welfare systems or social workers. Therefore, the students had limited understanding about societal values and structures that support and administer welfare and social support, the kinds of agencies that existed to support social welfare provisions and the kinds of roles that social workers perform. Hence, not only was the students' understanding of the occupation to which their studies were directed quite limited, but also of the social and societal context in which that work needed to be undertaken. Moreover, in this higher education program, students engaged in practicum work from the second week of first semester onwards. Consequently, the project focused on how these overseas students could be provided with experiences at the beginning of their course that allowed them to understand the role of social workers, the kind of institutions in which they work, the kind of institutions that support individuals who may well be the focus of social work practices, and understandings about the obligations of society to those who are ill-placed to fend for themselves or whose circumstances have become overwhelming. Hence, it was necessary to develop further the readiness of students prior to engaging in practicum settings. Yet, it was also commented that assumptions might be made about the levels of understandings held by domestic students about the very same set of factors. These are, what social workers do, the institutional structures and programs available, and the ethos of social welfare provision within a society which is expecting citizens to be increasingly less dependent upon the state. Put simply, many domestic students came from circumstances where they had little if any exposure to the social welfare system themselves.

All of these factors associated with students' readiness in terms of their interests, realism, capacities and prior experiences should be considered in terms of the organization of overall experiences (i.e. the curriculum) for students because they will be central to the experienced curriculum (i.e. what sense students make of what has been provided for them and how they elect to engage with it). In addition, particular pedagogic practices can be used by university educators and practitioners to develop the procedural capacities, understandings and values that will assist students be effective in their learning experiences within practice settings.

6.5 Challenge of Providing and Managing Experiences for Students Who Are 'Time Jealous'

Making effective use of students' time has become a key concern within contemporary higher education. The findings from the fellowships indicate that the following needs to be considered in the organisation and implementation of educational provisions: (i) students are often 'time jealous'; (ii) need to utilise students' time

effectively and (iii) securing students' engagement with educational activities and interactions. These three related sets of concerns are now briefly introduced.

6.5.1   Students Are Often 'Time Jealous'

It is often claimed that higher education students are 'time poor'. That is, because of their need to work part-time, to travel and fulfil social, economic and other obligations, contemporary students are left with limited time for their university studies. This situation has been decried as leading to students not engaging fully in university life. This includes their lack of engagement in kinds of interactions and activities that previous generations of university students have enjoyed. Indeed, rightly or wrongly, the perception is that many and perhaps most contemporary students are only fleetingly on campus and attend only those lectures and tutorials that are subject to attendance monitoring or assessment. All of this 'time poorness' is exacerbated in those higher education programs that make further demands upon the students' time through practicum or mandated periods of workplace experiences and requirements to fulfil the obligations for professional endorsement. Together, these commitments can make further demands on students' time. So, contemporaneously, there is an unhappy coincidence between growing expectations and demands upon student time for practicum placements and work experience, on the one hand, and students' wanting and needing to engage in part-time employment and also maintain a social life and interests on the other.

Moreover, the findings from some of the projects indicate that more than being 'time poor' many of today's higher education students are, more precisely, 'time jealous'(Allied Health, Midwifery projects, etc.). That is, they jealously guard and manage their time, including that allocated to their studies. The difference between being 'time poor' (i.e. not having enough time) and being 'time jealous' is quite distinct. The latter means that students are now more likely to be actively and critically evaluating demands upon their time made by their university studies. They then respond to these demands according to those aspects or activities they view as being worthy of their investment of their time. In particular, as long recognised, students are most likely to direct their energies towards tasks associated with meeting immediate goals, such their assessment tasks, and giving less regard and attention to other tasks which are not the subject of such demands. Hence, much of higher education curriculum is assessment driven. Similarly, within these projects, where there was a requirement for students to demonstrate competence in practice, this also attracted their attention and directed their energies. Yet, being 'time jealous' goes further than this. It is central to the time, effort and intensity that students allocate to their studies: i.e. what and how they will learn. That allocation of time is likely most directed towards very immediate outcomes. Moreover, ultimately, as the quality of individuals' learning arises from the effort they exercise in how they construe what they experience and then construct knowledge from it, if they are

parsimonious with that effort and engage only superficially, quite likely the learning arising will reflect that effort and engagement.

This issue of student 'time jealousy' was evident in many of the projects. This included resentment at time spent on these activities and strong dissatisfaction when they were asked to undertake activities that had no academic credit value or made unreasonable demands. For instance, students in an engineering program were expected to engage in 600 h of work experience to qualify for professional registration that was built into their degree (Engineering 1 project). So, for many students this demand to engage in voluntary work came at the cost of their paid employment, which for some was a necessity not a nicety. However, this 'time jealousy' was most starkly evident in one of the fellowship projects in which students in three fields of healthcare (paediatrics, podiatry and prosthesis) were requested to attend a 2-day orientation program to prepare them for, support them in and enhance their forthcoming practicums in healthcare settings. The program was held in orientation week. The process and content of the orientation program was premised on one that had been effectively enacted within the same faculty in the previous year for physiotherapy students. However, much of the student feedback about this program was very uncomplimentary and critical. Students reportedly resented having to attend such a program in orientation week, and pointedly indicated that their attendance had come at the cost to other commitments, principally paid employment and recreational activities. They were also highly critical of any element of the program that was not directly pertinent to activities they would be engaged in the coming semester, and in the next few weeks of that semester. Anything outside of their own specific discipline was deemed to be irrelevant and a waste of their time in having to hear about or consider it. Of course, there are likely to be some legitimate bases to some of these criticisms, including whether this activity should have come earlier in their study program.

In this way, the implications of student time-jealousy are quite far reaching for higher education. They include a basis upon which students will participate in learning experiences both within and outside of university settings. Consequently, experiences such as those provided through practicums and the like, which often come on top of what is held to be the allocated time for each course, might well be the target for students to be even more strategic about the allocation of time and effort. Of specific concern is the narrow and presentist focus students might be adopting. Whilst this is understandable from their perspective, because of demands upon their time, it may not be the best vehicle for the kind of more broadly applicable and expansive learning that is supposed to arise from higher education. Moreover, vociferous and aggressive responses from students to any additional demands may well lead to the reshaping the goals of the curriculum in terms of what can be expected students will do, and strong criticism of teachers who are perceived to expect too much from students. Furthermore, such approaches and bases of engagement are likely to shape how students engage with what is provided for them and, as a consequence, what they come to experience and then learn from their experiences within higher education provisions.

6.5.2   Securing Students' Engagement with Educational Activities and Interactions

The tendency for students to allocate time according to personal needs and immediate imperatives, including those required to complete courses, is hardly new. Yet, one of the key qualities of occupations that are designated as being professional is a requirement for higher order thinking, which is likely common to all forms of work. Indeed, the massiveness of the knowledge required for those particular occupations is probably what sets them apart from others (Winch 2004). It follows that the process of learning the breadth and depth of the knowledge required for many of the professions, and many other occupations, necessitates graduates engaging in effortful learning of that knowledge and being willing to exercise considerable energy, time and intentionality in achieving that outcome. The simple point here is that demanding kinds of learning requires effortful engagement by those who are engaged in it. Consequently, if students are unwilling or attempt to avoid engaging in this kind of learning, they are unlikely to develop the kinds of capacities required to qualify for and practice those occupations effectively.

More broadly, the phenomena of time jealousy is a clear indicator that beyond what experiences are provided for students both in university and workplace settings, ultimately the quality of outcomes will be dependent upon how students are able or select to engage with and learn from these experiences. Notably, in reflecting upon three decades of research into how people develop expertise in their field, Ericsson (2006) identified what he refers to as 'deliberate practice', as being essential for high levels of human performance. That is, beyond what is offered individuals in terms of opportunities and experiences, a key quality of those who are highly adept at what they do is the degree by which they engage in effortful engagement and practise within the domain of knowledge they are learning. This then is a process that is intentionally undertaken and exercised by individuals. Therefore, unless students are given justifications for what they have to learn effortfully, their learning may not be as effective as is required. It seems that making the purposes and salience of content explicit is likely to become a key concern. Unless students assent to the importance of the knowledge that they need to learn, they are unlikely to come to direct their time and effort into deliberate practice or other focussed learning activities.

It follows that, unless the circumstances for young people change and they have no need to engage in paid part-time work and are not distracted by social and family life, managing time jealous students' learning may become a key challenge for those teaching in higher education. This is likely to be particularly the case when their programs include periods of practice-based experiences which place pressure on the time they have for other activities. Moreover, this circumstance reminds of the importance of the most fundamental consideration for educational provision, and that is making explicit and justifying why particular learning is important and finding ways of maximising student time and utilising their energies to the fullest to assist in learning.

6.6   Salience of the 'Experienced Curriculum': How Students Construe and Engage

From the consideration above about student readiness, capacities and interest, is the conclusion that, beyond what is intended, students will learn by those who design and order their programs of study, sequence courses and select the content to be taught within those courses, and beyond what educators enact in terms of experiences in both in the university and practice setting, is how students come to experience and learn from what is intended and provided by higher education institutions. The latter constitutes the 'experienced curriculum' (Billett 2011). The findings here are discussed in terms of the: (i) importance of the 'experienced' curriculum; and (ii) centrality of student engagement.

6.6.1   Importance of the 'Experienced' Curriculum

A foundational and enduring concern for education is what students come to experience through their participation in their program of study and from which they learn. This experience is, therefore, central to any provision of education, but particularly those in which experiences are provided in different kinds of settings, to achieve a specific educational purpose. As noted earlier, of the three concepts of curriculum that are adopted here to explain and evaluate provisions of learning within higher education: (i) the intended curriculum – what students are expected to learn through the organization of sets of experiences; (ii) the enacted curriculum – what is provided for students through the implementation of the course and (iii) the experienced curriculum – the sense students make from what is provided for them and what they learn from it, and in this way, the importance of the third conception becomes paramount. There is no simple process of knowledge presentation and subsequent construction by learners (Lave 1993), as in the transmission of knowledge.

Instead, it is learners (i.e. students) that construe and construct (i.e. learn) from what they experience (Billett 2009a). This includes students making judgments about the worth of what is being presented to them and how they go about engaging with what is being afforded them, and how they learn from those affordances. Students may engage in the process of knowledge construction on the basis of being more or less informed about what is important and what is less important in what they are experiencing. These kinds of processes play out regardless of the effort, agency and intentionality, including the direction of learner agency that students elect to exercise. Consequently, the 'experienced curriculum' becomes central to what is learnt, as do students' person epistemologies, which shape and direct their learning.

It is important to be reminded here that educational provisions are nothing more or less than an invitation to change. It is the degree by which the students take

up the invitation they are offered and what they do with it that is central to what they learn. This consideration perhaps plays out most forcefully within educational provisions that engage students in a range of social and physical settings from which they are intended to learn. Each of these settings has distinct bases for performance, makes different demands upon learners and in ways they and their teachers might not have anticipated and find challenging, and may be inconsistent with their expectations and even the course requirements. All of these considerations are slightly contrary to other trends within higher education, such as those in which students' intended learning is aligned with national statements of occupational competence within which students are being asked to demonstrate competence (Grealish 2015; Hungerford and Kench 2015). That is, considerations and requirements external to education institutions, students' experiences and expectations necessarily become the focuses of educational intents. Consequently, the 'experienced curriculum', the basis of how students construe and construct what is afforded them, becomes a far more central concern than is perhaps what is currently acknowledged. This may be particularly the case when there is an assumption that what is taught is learnt, as all too often is the understanding which external sponsors possess. This is why it is important to emphasize the constructive role played by students in their learning.

6.6.2 Centrality of Student Engagement

it follows from what has been emphasized above and restated here is that how students engage what they know, can do and value with what they experience is essential to how and what they learn. Hence, student engagement is a central concern for any educational provision. Yet, this process of experiencing is, in many ways in by degree, person-dependent, and shaped by individuals person epistemologies (Billett 2009b). The process of experiencing will, therefore, be related to individuals' prior experience and also the way in which the experiences occurring, including opportunities to engage with others about what is being experienced. Whilst focusing on student activities, this is not to assume that their engagement and learning is beyond the control of and, therefore, not the responsibility of educators. Instead, it suggests that providing particular kind of experiences is necessary to make the worth of those experiences plausible for and engagement in by students. Consequently, particular aspects of the content may need to be emphasized and managed carefully to ensure that students engage with that content, and be encouraged to engage with it. A commonly used device, for instance, is for assessment tasks to be structured to address the key issues which those teaching in universities want learnt. This is a practical and helpful approach for directing students' attention. Yet, other means of engaging students effortlly and with clear intent now also become necessary. Students report being highly and intentionally engaged in experiences that will prepare them for tasks in which they are required to demonstrate competence, perform publicly, or otherwise secure specific outcomes. These kinds of engagement can become a key consideration for

both the intended and the 'enacted curriculum'. Certainly, the more that is known about students' needs and readiness the greater the prospect for alignment between what experiences are being provided and the kinds of learning which are intended to arise.

For instance, one of the student-related concerns that was reported in the 20 projects of the second fellowship was a preference for engaging in work and practice settings incrementally and in ways which allowed them to progressively engage in and learn through in the activities and interaction of settings. This is the focus of the next section.

6.7   Incremental Exposure to Practice-Based Experience and Progression Preferred

Certainly, student responses to preferred means of engagement within practice settings consistently emphasized the importance of incremental exposure to their engagement in practice-based experiences. That is, despite there being a range of different purposes to engage students in practice settings, there was a commonly reported preference for incremental engagement in these settings. Students proposed there should be incremental exposure in terms of the demands and duration of those engagements and kinds of activities in which students engage. Hence, regardless of whether learning about the occupation, variations of the occupational practice, or developing the capacities to be effective in that occupation, gradual exposure to practice settings and incremental engagement in occupational tasks were helpful. In many ways, this finding legitimates students' requests that their engagement with practice-based experiences is gradual and commensurate with their readiness. The rationale for this incremental exposure to workplace activities is fourfold: (i) novelty of experience; (ii) addressing issues of confidence; (iii) use as an organizing principle and (iv) developing occupational capacities.

Firstly, for the majority of students in these programs, their experiences in physical and social setting of workplaces work settings presents them with something which is quite novel. Hence, a process promoting gradual engagement with these settings and their activities may well be how to assist students being overwhelmed by totally new experiences and multiple demands that can lead to a dissonance rather than effective learning. This gradual engagement can address the level of readiness of students to engage in and make sense of the environment and its activities, not the least of them being identifying and reconciling these with what has been experienced in the educational setting. It is also understood that much of learning through engagement in particular social and physical settings is through the process of mimesis (i.e. observation, imitation and practice) (Billett 2014b), which requires an opportunity to make sense of the work environment, come to understand the requirements for performance and then come to consider how they might be realized.

Secondly, some students referred to issues of a lack of confidence, elements of anxiety and concerns about the requirements for performance in practice settings and the demands these practicum arrangements made upon them. For instance, students in a business school of one university reported not being confident about undertaking small projects for host workplaces (Commerce project). The lack of competence in performing procedures on patients or clients was, for many students, outside of their prior experience. Therefore, the more incremental approach provides for opportunities for students to become familiar (i.e. through observation and engagement in peripheral tasks) within the kind of settings in which they will need to perform, learn initially about performance requirements without having to perform them immediately. This moratorium allowed them to become more familiar with environments that are wholly novel to them before engaging as an effective participant. This process of becoming familiar can include simply understanding the physical layout, social relations and hierarchies and also clients or other workplace demands that might best be understood before students engage directly with them. The issue of confidence also emphasizes those raised above about learner readiness and having the capacities to perform effectively in these kinds of settings.

Thirdly, incremental engagement in workplaces also provides a basis for organizing interventions within the educational setting that prepares students procedurally (e.g. with the capacities they required to perform particular tasks), to understand the requirements for performance within these settings and to gain confidence in performing in an environment which is novel to them, yet often requires them to perform in quite public ways. Consequently, opportunities provided through incremental engagement in work-related activities can do much to manage the development of students' sense of self and efficacy associated with their selected occupation. Through such engagement there is the potential to develop these attributes in productive ways, rather than being overwhelmed and leading to negative consequences for learners in terms of their confidence, sense of self and desire to take this occupation as their vocation. It is also understood that individuals' effective engagement with new activities and tasks likely arises from success with those tasks and abilities to be able to apply them effectively. For instance, the literature on teachers' professional development indicates that commitment to particular practices for innovations arises through successful application far more than mere enthusiasm (Mclaughlin and Marsh 1978). As a key goal for occupational preparation is that individuals will come to accept their selected occupation as their vocation (i.e. their assent to it being what they want to engage in this come to identify with). Therefore, providing the means for that development in ways that are incremental, measured and more likely to provide successful outcomes need to be emphasized within the ordering of students' experiences (i.e. the 'intended' curriculum). This includes how they are prepared for activities in practice settings.

Fourthly, this incremental engagement is fundamentally consistent with an approach to developing occupational capacities that has been rehearsed over a millennium or more (Billett 2010). Historical and anthropological studies provide clear evidence of the ways in which incremental and measured engagement in occupational practice has been an effective curriculum principle in the devel-

opment of occupational capacities across humanity and cultures (Billett 2014a). Historically, across occupations, including professions, the development of the capacities required to enact occupations have been developed through the practice of them. For instance, in Hellenic Greece, the process of preparing individuals to engage in the profession of medicine was premised upon learning through practice alongside a more experienced medical practitioner and incrementally engaging in more demanding tasks. Medical students were positioned as assistants assigned specific roles in working with patients that assisted them learn medical practice (Clarke 1971). Similarly, anthropological studies indicate the learning curriculum, which likely is the most utilized form of any curriculum, essentially comprised of a pathway of experiences that incrementally engaged learners in increasingly complex activities that were consistent with their readiness to engage in the next level of activities (Lave 1990). Consequently, there is nothing particularly novel about incrementally introducing students to occupational practice. Indeed, it constitutes a fundamental and practical consideration within curriculum and also pedagogy. As such, it is highly consistent with long-standing beliefs and practices about how students' learning of an occupation needs to be supported to progress effectively. That is, through organizing experiences aligned with students' readiness to engage and learn, and then build on that level of readiness.

In sum, this concern about incremental engagement brings together two important propositions. The first is student readiness to engage in effective learning experiences and their progression along the pathway of learning experiences in which they can engage productively. The other is the alignment of what needs to be learnt with the kinds of experiences that are organized for students. These two concerns seem salient to offering experiences that can be used to effectively integrate practice-based experiences within higher education programs. However, achieving these goals may be more difficult in work-integrated learning experiences because those involved in organizing, providing and extending experiences to students in workplaces largely do so outside of the control and influence of education institutions. Therefore, the two final propositions underpinning effective work integrated learning experiences comprise attempts to align all parties' interests within these kinds of experiences.

6.8   Educators' Diverse Conceptions of Worth and Competence with Practice Experiences

The actions and behaviours of those who teach in higher education and the degree by which they support the integration of experiences in practice and academic activities are likely to be a factor in their effectiveness. Yet, not only are students 'time jealous', but those who teach in universities have increasing demands upon their time and are often required to become strategic in how they engage with their work activities and use their time. Consequently, the degree by which educators

believe the time spent in organizing students' practical experiences, and also providing opportunities to augment and enrich what students learn through those experiences is worthwhile, will influence the effort and intentionality they direct towards these activities. Therefore, unless teachers believe practice-based activities are worthwhile and legitimate learning experiences and should be integrated within the overall curriculum of the program, it is unlikely they will enact arrangements to intentionally maximize students' learning experiences to achieve that outcome. At one level, the findings from the fellowship projects indicate the worth that educators place on these kinds of experiences can be quite central to the kinds and qualities of experiences they provide and organize for their students. This consideration of experiences extends to the effort they expend in being innovative in their approach with students and finding ways to most effectively utilize students' experiences in practice settings. What was noteworthy in many fellowship projects was that members of the project teams understood the value of these experiences and were keen to use and maximize them as part of their teaching. However, it would be naive to assume that such sentiments are universally embraced by teachers within higher education.

At another level, there are also going to be distinct considerations by educators about how these activities are engaged with, for what purposes and through what means. This consideration is likely to be shaped by the kind of understandings and procedural capacities educators possess about learning processes and outcomes. Even the most enthusiastic and committed of educators may not be able to fully utilize and secure optimal outcomes from students' experiences unless they can effectively organize or enact learning activities for them. This consideration for the enactment of the curriculum may include finding ways of bringing students together in groups so that they can share their experiences, consider what they have learnt in practice settings and identify how this learning relates to the goals of their university programs, and, of course, the occupations for which that being prepared. Being judicious and careful about the kind of interventions undertaken and how they are managed likely arises through an informed understanding of and experience with such processes. For instance, those experiences focused on teaching or telling, however well-intentioned, may not provide the kinds of opportunities learners require to consider what they have experienced and to reconcile it productively with their higher education studies. Not all educators have these kinds of interests or capacities, nor possibly the kinds of sensitivities associated with permitting students to engage in peer-led processes and understanding how such processes need to be organized and managed to be effective. The evidence from one study, which focused on the perceptions of university teachers within the same discipline (i.e. business) provides an instance of there being diverse views about the worth of practice-based experiences, the likelihood of effort being expended to engage with and utilize those experiences, and the presence of the kind of capacities needed to effectively utilize those experiences. Fundamental issues associated with the valuing of teaching experiences (i.e. the development of conceptual over procedural knowledge) and of the purposes of higher education (i.e. a focus on informed inquiry rather than teaching occupational capacities) and how these activities are

rewarded within higher education institutions will likely influence educators' efforts for providing and enriching practice-based experiences.

As foreshadowed here and as elaborated in later chapters, the bases upon which students can be prepared adequately for practice-based experiences, the degree by which they can be supported when engaging in them, and then provided with experiences through sharing and reconciling what they have learnt within that program, are all quite central to the effectiveness of students' experiences in practice settings. This extends to their ability to develop the understandings, procedures and dispositions that will assist them perform effectively in their occupational practice beyond graduation.

All of this goes to suggest that there will inevitably be quite different responses from teachers in higher education and that it may be necessary to develop further some of those teachers' capacities to effectively utilize students practice-based experiences and assist the students reconcile what they have learnt through those experiences as directed towards their course outcomes. The capacity of these educators to effectively utilize those experiences and also to understand that teaching alone may not be the most effective approach to assisting students learn adaptable occupational capacities. So, although some of the propositions focus on the kinds of experiences provided within the programs, the positioning of students within these arrangements and promoting their engagement, the views and values of educators, and their capacities to organise and sequence effective experiences, and then provide appropriate pedagogic practices, should shape the quality of students' learning experiences both in practice settings and then in the integration of those experiences within their overall higher education curriculum.

6.9 Importance of Aligning All Parties' Understandings of Purposes of WIL and Its Processes

Although an unobtainable ideal, but one worth trying to work towards, is having consistency in understanding of the goals, processes and responsibilities across all of the parties involved in providing students' experiences in practice settings within higher education programs. When there is common understanding amongst workplace practitioners and supervisors, teachers in higher education and students about the purposes, processes and desired outcomes of these experiences, the prospects of decision-making in organizing learning experiences, how they are enacted and experienced are most likely to be consonant. In utilizing practice-based experiences, the shared understandings amongst the various parties can lead to greater confidence about what is feasible, possible and reasonable in the provision of those experiences and how they might be supported in workplace settings. Moreover, the means by which these experiences will be enacted in both educational and practice settings can also proceed with greater confidence and be informed by an understanding of expectations, roles and activities across both settings. Furthermore,

a shared understanding of team roles and expectations are important for those who implement and experience: workplace practitioners, university teachers and students.

Nevertheless, securing such consonance is not easily realized and needs to be continually worked upon and maintained. It also likely requires institutional arrangements which engage partners and develop mutual working relationships. For instance, in the German dual system, where such mutuality seems to be central to the effective provision of apprenticeships, the relationships amongst industry representatives, those of particular enterprises and educational practitioners are premised and enacted through co-operation and shared understandings about what needs to be achieved. Hence, being able to arrange particular kinds of experiences within educational institutions and workplaces in ways that are informed about what experiences apprentices are having elsewhere, and what might be expected of apprentices at particular points of time in their development. These premises become operating principles through which the provision and integration of practice-based experiences progress and are supported both institutionally in the workplace and educational institution and are valued and respected (i.e. legitimated) through the mature relationships founded on a valuing of the importance of skill development.

The development of such arrangements is far easier in some occupations than others because of historical precedents, cultural practices and also institutional factors. For instance, traditions in nurse, law, medical and teacher education often lead to well-established partnerships and practices that can lead to the kind of understandings referred to above. However, these kinds of arrangements may be less evident and more highly differentiated and distributed in occupations and sectors that lack a history of the provision of these kinds of experiences. Where these kinds of partnerships between educational institutions and those outside of them are best developed and sustained appear to be when they operate on a collaborative basis. That is, rather than one dominating the other and also when each of the partners is willing to make concessions to the overall purpose of the educational program. For instance, in the German dual system referred to above, workplaces provide experienced and skilled workers who act as meisters for apprentices and often invest considerably in apprentices' development (Deissinger 2001). Moreover, reciprocally, whilst receiving and expecting to receive an effective apprenticeship experience, apprentices are remunerated at relatively low levels of pay compared with their adult counterparts. These arrangements reflect the reciprocity in the relationship between the workplace and the learner: support and commitment on the part of the employer in developing the capacities of the apprentice, and an acknowledgement by apprentices that they are learners and are receiving an effective preparation. Of course, not all of these arrangements are ideal or practised as intended. However, the principle of reciprocity seems important. In studies examining the working relationship between educational institutions and workplaces and other organizations in the community, it has been found that when each of the partners is seen to be working in the interest of the general community

that engagement with and commitment to the educational provision being shared with the community and its enterprises is strongest (Billett and Seddon 2004).

It would seem that building these kinds of arrangements is on the minds of many higher education institutions as they seek to firm up their relationships with enterprises that will accept their graduates and engage with the university in other kinds of productive relationships, such as research. However, it may well be that it is at the operational level (the places where students will engage in practice-based experiences) where the common understandings and engagements are likely to be the most important.

6.10   Key Propositions for Organising Enacting and Experiencing Work Integrated Learning

In sum, this chapter has sought to identify some of the key findings that can inform teachers in higher education work in promoting student learning through practice-based experiences that were identified across the 25 projects that comprised those fellowships. This chapter has presented a series of broad findings from these fellowships, advanced as a set of broad propositions that are proposed as shaping considerations for how the organisation enactment and experiencing of practice-based experiences can be utilised and integrated within higher education programs. The eight propositions advanced above variously relate to the augmentation of students having workplace experiences, as, on their own they are insufficient, the importance of students being prepared for those experiences, a consideration of students' readiness to engage in and learn effectively at particular points in the development, and the important requirement of considering students as active learners who are also directed by other needs and priorities. Such a consideration is salient here because perhaps the most important educational process is what is referred to as the experienced curriculum: students' experiencing of what is provided for them and how and what they learn from that experience. To respond to this important factor, it is necessary to consider and organise students' engagement in practice experiences in ways that are incremental and offer experiences that are associated with the readiness (i.e. ability to effectively engage). Beyond students' interests and bases for engagement is that of teachers in higher education themselves on how the capacities and interests will be directed to engage in organising and utilising practice-based experiences. Finally, there is the important proposition, however idealistic, that needs to be worked towards of trying to align all of the understandings and interests of those who are involved in organising, implementing and experiencing practice-based learning opportunities. Together, these propositions stand as some bases through which considerations of curriculum, pedagogies practice and also students' personal epistemologies can progress.

Indeed, in the next and subsequent chapters, more specific findings and recommendations are made which focus upon consideration of curriculum practices,

pedagogic practices and students' personal epistemologies. These then provide more finely grained findings and offer deductions about these factors and suggestions for practice which are more tightly focused. These chapters reporting the findings projects are aggregated and ordered under three distinct categories: (i) principles associated with the effective enactment of the curriculum, which include experiences in practice settings (Chap. 7); (ii) pedagogic practices that might be enacted before, during and after students have engaged in practice-based experiences (Chap. 8) and (iii) engagement and development of students' personal epistemologies in ways that are effective in supporting their learning (Chap. 9).

References

Bailey, T. R., Hughes, K. L., & Moore, D. T. (2004). *Working knowledge: Work-based learning and educational reform*. New York: RoutledgeFalmer.

Billett, S. (2001). Knowing in practice: Re-conceptualising vocational expertise. *Learning and Instruction, 11*(6), 431–452.

Billett, S. (2009a). Conceptualising learning experiences: Contributions and mediations of the social, personal and brute. *Mind, Culture, and Activity, 16*(1), 32–47.

Billett, S. (2009b). Personal epistemologies, work and learning. *Educational Research Review, 4*, 210–219.

Billett, S. (2010). The practices of learning through occupations. In S. Billett (Ed.), *Learning through practice: Models, traditions, orientations and approaches* (Vol. 1, pp. 59–81). Dordrecht: Springer.

Billett, S. (2011). *Vocational education: Purposes, traditions and prospects*. Dordrecht: Springer.

Billett, S. (2014a). *Mimetic learning at work: Learning in the circumstances of practice*. Dordrecht: Springer.

Billett, S. (2014b). Mimetic learning at work: Learning through and across professional working lives. In S. Billett, C. Harteis, & H. Gruber (Eds.), *International handbook of research in professional and practice-based learning*. Dordrecht: Springer.

Billett, S., & Seddon, T. (2004). Building community through social partnerships around vocational education and training. *Journal of Vocational Education and Training, 56*(1), 51–67.

Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher, 18*(1), 32–34.

Campbell, M., & Zegward, K. (2015). Developing critical moral agency through workplace engagement. In S. Kennedy, S. Billett, S. Gherardi, & L. Grealish (Eds.), *Practice-based learning in higher education: Jostling cultures* (pp. 47–63). Dordrecht: Springer.

Cartmel, J. (2011). A considered curriculum for preparing human service practitioners: Structuring circles of learning and change. In S. Billett & A. Henderson (Eds.), *Developing learning professionals: Integrating experiences in university and practice settings* (pp. 101–118). Dordrecht: Springer.

Clarke, M. L. (1971). *Higher education in the ancient world*. London: Routledge & Kegan Paul.

Deissinger, T. (2001). Vocational training in small firms in Germany: The contribution of the craft sector. *Education + Training, 43*(8/9), 426–436.

Ericsson, K. A. (2006). The influence of experience and deliberate practice on the development of superior expert performance. In K. A. Ericsson, N. Charness, P. J. Feltowich, & R. R. Hoffmann (Eds.), *The Cambridge handbook of expertise and expert performance* (pp. 685–705). Cambridge: Cambridge University Press.

Gherardi, S. (2009). Community of practice or practices of a community? In S. Armstrong & C. Fukami (Eds.), *The Sage handbook of management learning, education, and development* (pp. 514–530). London: Sage.

Grealish, L. (2015). Professional standards in curriculum design. In S. Kennedy, S. Billett, S. Gherardi, & L. Grealish (Eds.), *Practice-based learning in higher education: Jostling cultures* (pp. 85–97). Dordrecht: Springer.

Grubb, W. N., & Badway, N. (1998). *Linking school-based and work-based learning: The implications of LaGuardia's co-op seminars for school-to-work programs* (pp. 1–30). Berkeley: National Center for Research in Vocational Education.

Hodges, D. C. (1998). Participation as dis-identification with/in a community of practice. *Mind, Culture, and Activity, 5*(4), 272–290.

Hofer, B., & Pintrich, P. R. (1997). The development of epistemological theories: Beliefs about knowledge and knowing and their relation to learning. *Review of Educational Research, 67*(1), 88–144.

Hungerford, C., & Kench, P. (2015). Standards and standardisation. In S. Kennedy, S. Billett, S. Gherardi, & L. Grealish (Eds.), *Practice-based learning in higher education: Jostling cultures* (pp. 65–83). Dordrecht: Springer.

Lave, J. (1990). The culture of acquisition and the practice of understanding. In J. W. Stigler, R. A. Shweder, & G. Herdt (Eds.), *Cultural psychology* (pp. 259–286). Cambridge: Cambridge University Press.

Lave, J. (1991). Situating learning in communities of practice. In L. B. Resnick, J. M. Levine, & S. Teasley (Eds.), *Perspectives on socially shared cognition* (pp. 63–82). Washington, DC: American Psychological Association.

Lave, J. (1993). The practice of learning. In S. Chaiklin & J. Lave (Eds.), *Understanding practice: Perspectives on activity and context* (pp. 3–32). Cambridge, UK: Cambridge University Press.

Malle, B. F., Moses, L. J., & Baldwin, D. A. (2001). Introduction: The significance of intentionality. In B. F. Malle, L. J. Moses, & D. A. Baldwin (Eds.), *Intentions and intentionality: Foundations of social cognition* (pp. 1–26). Cambridge, MA: The MIT Press.

Mclaughlin, M. W., & Marsh, D. D. (1978). Staff development and school change. *Teachers College Record, 80*(1), 69–94.

Newton, J. (2011). Reflective learning groups for students nurses. In S. Billett & A. Henderson (Eds.), *Developing learning professionals: Integrating experiences in university and practice settings* (pp. 119–130). Dordrecht: Springer.

Newton, J., Billett, S., Jolly, B., & Ockerby, C. (2009a). Lost in translation: Barriers to learning in health professional clinical education. *Learning in Health and Social Care, 8*(4), 315–327.

Newton, J., Kelly, C., Kremser, K., Jolly, B., & Billett, S. (2009b). The motivations to nurse: An exploration of factors amongst undergraduate students, registered nurses and nurse managers. *Journal of Nursing Management, 17*(3), 392–400.

O'Keefe, M., McAllister, S., & Stupans, I. (2011). Health service organisation, clinical team composition and student learning. In S. Billett & A. Henderson (Eds.), *Developing learning professionals: Integrating experiences in university and practice settings* (pp. 187–200). Dordrecht: Springer.

Piaget, J. (1976). *Behaviour and evolution* (trans: Smith, D. N.). New York: Pantheon Books.

Richards, J., Sweet, L., & Billett, S. (2013). Preparing medical students as agentic learners through enhancing student engagement in clinical education. *Asia-Pacific Journal of Cooperative Education, 14*(4), 251–263.

Sweet, L., & Glover, P. (2011). Optimising the follow through for midwifery learning. In S. Billett & A. Henderson (Eds.), *Developing learning professionals: Integrating experiences in university and practice settings* (pp. 83–100). Dordrecht: Springer.

Valsiner, J. (2000). *Culture and human development*. London: Sage.

Winch, C. (2004). What do teachers need to know about teaching? A critical examination of the occupational knowledge of teachers. *British Journal of Educational Studies, 52*(2), 180–196.