Assessment: Defining the worth of professional practice

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ABSTRACT

Professional practice is an integral component of many university qualifications, especially in the professions. Despite the extensive literature on the value of such experience based learning, the perception remains prevalent in some academic circles, that professional practice learning is somehow inferior to traditional classroom learning and not at a university standard.

Most academics, including those responsible for professional practice, espouse high level learning outcomes for their university courses. However the rhetoric of such claims does not always translate to equivalent teaching, learning and assessment experiences (Biggs, 1996). This paper reports on research investigating the extent to which the claims of high level learning outcomes are realised in the assessment of professional practice units of study.

Data was gathered in the form of transcribed interviews with academic staff and documentation of the assessment strategies used in professional practice. The data was analyzed from the theoretical perspective offered by 'constructive development' (Kegan, 1994). Constructive development theory has been usefully applied to curriculum evaluation as well as to the evaluation of program assessment (Taylor & Marienau, 1997).

The paper discusses the outcomes of the analysis and explores the apparent contradiction between the learning outcomes and assessment strategies of professional practice and the perceived role of professional practice in university curricula. The potential of assessment to provide a convincing argument as to the value of professional practice learning in academic degrees is discussed.

What is Professional Practice?

Professional practice is a curriculum component of many professional qualifications offered by universities both in Australia and overseas. In essence, professional practice involves some degree of learning in the context of actual work experiences rather than the context of the university classroom or laboratory. The 'work' involved is not necessarily restricted to paid employment activities but is typically drawn from the range of work contexts graduates of the degree may be expected to encounter. Different disciplines and institutions refer to professional practice by many different terms. In the medical and health sciences it is also commonly referred to as practicum, clinical education, or field placement. As well as the diversity of terms used to describe professional practice, the nature of the teaching and learning experiences which constitute professional practice are equally diverse.

In the experience of this author, the role of professional practice in university curricula varies considerably between different fields of study and institutions. In some curricula professional practice is situated as a precursor to the learning experiences of the university classroom. In other courses it is a parallel or complementary learning experience, existing alongside subjects taught in the classroom. Other degrees position professional practice as a follow-on to earlier curricula as in the case of an internship at the end of a degree. In a few degrees, professional practice is employed as an alternative to classroom learning rather than an addition. These curricula are sometimes referred to as work-based learning curricula and are an emerging model of university degrees. It would appear that most professional degree curricula use combinations of these variants of professional practice.
Curricula teaching and learning assumptions

In considering the variety of forms of professional practice curricula in Australian university degrees, it is apparent that there are significant implications for teaching and learning which arise from these different forms. As with university teaching in general, the structure of a curriculum reflects the underlying conceptions of teaching and learning held by the curriculum designer.

Curriculum variants which situate professional practice as a precursor to classroom learning may be hypothesized to do so based on the belief that subsequent classroom based instruction will result in better learning if the students can relate such learning to a previously experienced context. A similar assumption may underpin curricula where professional practice is situated in parallel to classroom instruction. In such a curriculum, professional practice may be conceptualised by curriculum designers as providing a context to support relevant learning in the classroom. Alternatively some university curricula may situate professional practice alongside classroom learning based on the belief that this provides opportunities for learning applied knowledge to supplement the theory taught in the classroom. A similar assumption may underpin the inclusion of professional practice as a finishing year of a degree to consolidate previously learnt theoretical and applied material. Alternatively it may be that professional practice is included in degrees only to train students in 'practical skills' and technical knowledge independent of the theoretical material taught in the rest of a degree. In all these models, professional practice is in some way secondary or subordinate to classroom teaching. The use of professional practice as a primary teaching and learning experience is less common in university courses. It is however interesting that in many cases those professional degrees which are relatively recent inclusions in university offerings, (eg nursing), were often previously taught predominantly through work based, rather than classroom based, learning.

The different conceptions hypothesized for the role of professional practice in university curricula are closely related to different perspectives on the role of experience in learning and the interested reader is referred to Boud and Walker for a detailed discussion of learning from experience. The hypothesized diverse understandings of the role of professional practice in the curricula of university degrees would be expected to manifest in a diversity of learning outcomes. The experience of this author would suggest that this is the case, with different professional practice curricula specifying learning outcomes of very different types and levels. Examples gathered from staff development workshops over a five-year period at the University of Sydney include learning outcomes specifying higher order intellectual capabilities, professional competencies, technical skills and vague learning outcomes such as 'useful experience'.

As with many other examples of university curricula, the intended learning outcomes do not always effectively communicate the intentions of the curriculum designer to students or academic colleagues. Even when clearly stated, there is not always agreement from learners and other teachers that these are indeed the outcomes achieved. The reality of the actual learning experience may not always match the rhetoric of the intended learning outcomes (Murray, K. & McDonald, R. 1997). Even given this, it is surprising that academic staff teaching involved in other aspects of teaching in the degree do not always seem to have a shared understanding of the contribution professional practice makes to the overall learning represented by the degree qualification.

Anecdotal evidence gathered over many years would suggest that in the opinion of the staff and students actually involved in professional practice, such curricula play an important, possibly essential role in the teaching and learning experiences of undergraduate students in the professional disciplines. However, experience also suggests that in the eyes of some
other academics, professional practice is a nonessential or unimportant component of a university degree. The perception remains that professional practice is the poor cousin intellectually of university classroom teaching. This view persists, despite professional practice's inclusion in the curriculum of most university degrees in the professional disciplines, and irrespective of the considerable body of research literature which demonstrates the pedagogical value of such experience based learning. Such educational research 'facts' alone do not appear to have been sufficient to convince some academic colleagues of the important contribution professional practice makes to university learning. One of the intentions of this research was to explore further this lack of shared understanding.

**Why is this an issue: A dangerous time for 'at risk' curricula.**

The Australia higher education sector is currently experiencing significant challenges and pressures for change. In the context of an increasingly diverse and growing student population, demands are being made on universities to be more accountable for both the effectiveness and the efficiency of their teaching. Universities have reacted to these demands in many different ways. Some degrees are attempting to squeeze 'more learning' into less time in order to reduce costs and meet the perceived consumerism of students and employers. In some cases the response has also involved covering more content in an attempt to keep pace with the exponential growth in new knowledge. In other instances universities have moved away from courses comprising scheduled lectures in response to calls for more flexible teaching made by students who need to be strategic in order to balance their study against the other competing demands of their busy lives.

In a climate of shrinking university resources (relative to student numbers and needs), teaching activities and approaches which are not clearly valued by all stakeholders are vulnerable to cost cutting initiatives.

In the case of professional practice the vulnerability is heightened at present. Many of the teaching 'costs' of professional practice have previously been carried by public sectors other than higher education. An obvious example of such a resource cost is the supervision (teaching) of university students on placements by staff not employed by the university. In the medical and health science disciplines, these staff are typically employed by the health department not by the higher education sector. While there is evidence (Ladyshewsky R, & Barrie S, 1996) that health department agencies can indeed derive a net cost benefit from well structured student placements, the perception of many health department administrators is that professional practice consumes staff resources that could otherwise be applied to patient care. With health care funding unable to meet public needs, many of the resources provided by such workplaces to support professional practice are now being withdrawn, and the costs of providing such resources passed back to the universities.

University funding is clearly limited and clearly finite. It is unlikely that governments would increase university funding to support professional practice if (when?), the agencies offering such placements withdraw their resources. In a situation where some academics in a department may be unclear as to the role and value of professional practice, it is equally unlikely that a department, or university, would reallocate scarce teaching resources to fund professional practice teaching. Particularly if such a reallocation required diverting resources from other more 'accepted' teaching activities such as lecturing. In light of the lack of shared understanding of the learning potential of professional practice it appears such teaching is particularly vulnerable in the present funding environment. It is perplexing that the research literature which demonstrates the pedagogical value of learning from experience has not convinced all staff of the importance of such curricula. In considering other sources of possibly more convincing evidence, university assessment is worthy of consideration.
Assessment is the means by which universities assure and demonstrate the learning of their graduates. If professional practice is to substantiate its claims as a valuable university learning experience, as opposed to a low level training exercise, it must demonstrate this through its assessment practices rather than rely solely on the pedagogic learning theory arguments presented in the literature. It is not until the assessment is considered that the stated learning outcomes actually have a reality beyond the rhetoric of the curriculum designer.

The investigation reported in the next section of this paper considers the extent to which professional practice curricula in a range of professional degree courses at The University of Sydney, demonstrate achievement of high level 'valued' university learning through assessment. The findings are contrasted with the reported extent to which incongruent perceptions of the educational value of professional practice exist within these degrees. The potential of assessment strategies to challenge such mis-perceptions is then explored.

Assessment

In exploring how professional practice was valued in the context of university teaching, the learning outcomes and assessment strategies of the undergraduate professional practice components of degree courses in seven professional disciplines within the Faculty of Health Sciences at The University of Sydney were considered. The seven disciplines included; Community Health, Orthoptics, Communication Disorders, Medical Radiation Technology, Occupational Therapy, Life and Leisure Studies, and Physiotherapy. The academics responsible for coordinating the professional practice components of each degree were interviewed. The semi-structured interviews sought:

1. Staff member’s perceptions of the nature of the intended learning outcomes targeted in the professional practice units,
2. Staff report of how assessment strategies required students to demonstrate achievement of such learning outcomes.
3. Staff report of how professional practice was valued as a learning experience by academic colleagues teaching in the degree.

In addition, assessment documentation for the professional practice units of each degree was also collected. The interviews were taped and transcribed. The transcripts were analysed and the reported intended learning outcomes and assessed learning outcomes noted for each course. The intended learning outcomes and assessed learning outcomes were then classified using a five tiered, hierarchical model of learning outcomes. The model was developed by Kegan and is a personal constructive-development model (Kegan 1994). This model provides a means of considering student learning as personal development in terms of a hierarchy of qualitative shifts in perception. It describes five developmental stages or ‘orders of consciousness’. Of particular relevance to the analysis of the interview data are the third and fourth order stages. These are considered to describe most significant development after adolescence. Fifth order consciousness is reportedly achieved by less than ten percent of the population and is considered by Kegan to be beyond the developmental remit of higher education. This model has been usefully applied to the evaluation of the effectiveness of curricula in promoting student development and in particular to the evaluation of program assessment (Taylor & Marienau, 1997).

Fourth order consciousness represents the type of development espoused in many university mission statements (The University of Sydney, 1999) and in the statements of intended learning outcomes of many university courses (Taylor & Marienau, 1997). The shift between third and fourth order consciousness appears to capture many of the distinctions claimed between training and education. In third order consciousness, learning relates to
socialisation of the learner into pre-existing discourses; knowing, without being able to reflect critically on what such knowing means. Third order consciousness does not encompass the ability of the learner to confidently assume independent responsibility for ongoing learning (Kegan, 1994). The learning outcomes of the professional practice curricula of the degree courses were classified on the basis of their potential to demonstrate student learning outcomes at the level of fourth order consciousness, congruent with the educational values espoused by the university in which the courses were offered. The analysis of the intended and assessed learning outcomes was designed to address the concern voiced by some academics, that the types of learning outcomes which were developed and assessed in professional practice were not the high level learning outcomes, considered to be the hallmarks of a university education.

The intended learning outcomes of professional practice

The analysis of the transcripts indicated that the academics responsible for six of the seven professional practice curricula espoused student learning outcomes from their final year courses which were classified as fourth order learning outcomes and as such were consistent with the level of learning outcomes valued in the university's mission statements.

They (the students) learn more than just how to do the job, they start to understand what it means to be a professional......they learn to reflect on their own development......they can be critical of knowledge......they learn it's about the whole interpersonal framework......they learn they are different individuals, that they are unique and work in different ways......they come back quite different people......to be able to justify and recognise different opinions......their tolerance of others values......things that have never been challenged in the classroom......things they have never realised about themselves......high level conflict resolution skills......they learn there's not one right way......it's that super-sense of propositional knowledge.

The intended learning outcomes reported for one of the seven disciplines classified as third order outcomes.

It is really a chance for them to learn all the practical skills......how to do the tests......clinical skills......they learn different practitioners techniques...

Fourth order learning outcomes do not negate the importance or value of third order abilities. However fourth order development adds the valuable contribution of the ability to independently reflect upon the products of such learning at a meta level.

The targeting of predominantly fourth order learning outcomes in most of the courses would suggest that these academics are intending to realise the learning potential of professional practice to foster learning as education rather than simply training. As such, they are espousing the same educational outcomes contained in the university's mission statement and statement of graduate attributes. The identification of a course targeting predominantly third order learning outcomes, would suggest that the full learning potential of such experiences may remain untapped in some degrees.

While this indicates the intentions of the academics in respect to student learning it does not demonstrate that the teaching and learning experiences of these courses do in fact achieve such aspirations. As with traditional classroom based courses where teachers have been noted to espouse such outcomes, the reality of the teaching and learning experiences and the student learning which results, may be considerably different (Biggs 1996). In
seeking to determine if the espoused outcomes were embodied in actual practice and in the assessed learning outcomes, the assessment strategies of the courses were considered.

The assessed learning outcomes of professional practice

Assessment has been referred to as the hidden curriculum of universities. In many ways it is the ‘acid test’ students apply to determine what and how to learn, certainly the question ‘is it in the exam?’ asked by students is a familiar one to most teachers. As such, the fourth order intended outcomes must be reflected in the assessed outcomes for those courses before they could be considered as an indication of the role of professional practice in achieving such learning. The presence of assessment strategies targeting fourth order levels of learning would indicate that the rhetoric of the intended learning outcomes was realised in actual practice.

In considering the descriptions of the actual assessment strategies and assessed learning outcomes of these courses it was apparent that in five of the six, fourth order curricula the assessment strategies were congruent with the stated learning outcomes. That is, they were designed to foster and reward fourth order learning outcomes.

The students maintain a log of their learning and reflect on their own development, they have to self assess ... they critique the suggestions values and practices they encounter in the placement ...to show they have engaged in a dialogue with their supervisor, they submit a portfolio of their reflections on different practices ...they assess themselves ... they need to show the competencies, but these are more than technical skills, the generic and critical thinking skills are embedded in our professional standards ... they are assessed on how well they have developed their individual professional qualities ... they can't pass just by imitating a good role model ... they can't just say 'that's the professional way', they have to question 'what does that mean to me'...they have to show insight into their own performance and how they will learn from it...

In one course, where fourth order learning outcomes were espoused, the assessment strategy did not appear to assess beyond the level of third order learning outcomes. The course which espoused primarily third order intended learning outcomes mirrored this in the reported assessed learning outcomes.

There is a checklist the supervisors use to mark which skills and techniques the student is competent in....it is based on observable performance.... There is an assessment grid with different performance levels.

A wide array of approaches to assessment were apparent in the strategies reported, however common to all fourth order strategies was the inclusion of elements of self-assessment. Student centered assessment approaches may be particularly relevant to the assessment of fourth order learning outcomes. This may reflect the importance of learner autonomy in this level of Kegan's model.

Documentation relating to the assessment strategies was also collected for corroboration of the interviewees’ comments and as the basis for a second study. Such documentation included written assessment criteria, self-assessment grids, negotiated learning contracts and other assessment artifacts. In each of the courses considered, the assessment documents supported the interviewees reported assessed learning outcomes. Subsequent research will collect completed student assessment scripts and other samples of assessed work to examine marking practices on these assessment tools.
Values

In addition to investigating the level of intended and assessed learning outcomes, the interview transcripts were examined to gain insight into current perceptions of the role and value of professional practice in university courses. In all cases, the academics involved reported a failure, to varying extents, of some of their academic colleagues and the institution in general, to recognise the educational value of professional practice components of the degree courses.

In some cases interviewees reported the perception that such learning was incidental to the real business of a university education and could be removed from courses without significantly compromising student learning.

*There is probably lip service to the value of clinical education....I was fairly disgusted with the lack of value placed on field-work education......field work is viewed as lower status, not a real academic subject......one of the senior lecturers said to me...oh you know you should just wipe field education from the course, they get enough practice after they graduate....I think there is still a feeling in the university system of 'what's clinical education doing in here?'...*

In other cases the learning was portrayed as being perceived as somehow secondary to the traditionally taught academic courses and was accorded lower priority by staff in directing students’ learning activities.

*Students sacrifice clinical time to work on other subjects...It's always thought that clinical can be flexible and should make accommodations for other theory subjects....I'm sure if it came down to it that some colleagues would be happy with just a three year theory based degree...*

In many cases the academics responsible for the professional practice units of study cited inequalities in funding for such courses.

*They're happy to fund lecturers to lecture students but when I need to pay a clinician to be out at a hospital to give extra tuition to students there is never any money for it......It is all taught on goodwill....*

The interviews also identified a trend of reducing availability of professional practice opportunities in some of the disciplines studied. In the majority of the courses considered, the university did not directly fund the actual teaching involved in professional practice. Instead it was provided by members of the profession in paid employment elsewhere. Many of the academics interviewed expressed concerns that in a climate of shrinking public expenditure, the limited funding presently available for such curricula would be redirected towards more recognised teaching on the basis that such teaching was more important.

*I worry that the clinical is going to become less and less a part of this course....a large part of our course's funding comes from the clinical subjects but the resources allocated to teaching those clinical subjects doesn't match that......It just isn't thought to be as important as the academic subjects.*

However, if it is the case that professional practice does promote learning at the level valued in a university education, then such funding decisions may be inappropriate.

The interviewees reported that perceptions of the academic value of professional practice were also reflected in the allocation of academic work-load. Academics interviewed
perceived they carried high teaching loads, however they considered their actual teaching work to be largely invisible to their colleagues. All the interview respondents reported their teaching role to be as a 'manager' of student learning. However, the absence of class contact hours was reported by some, to be seen by their colleagues as equating to a lack of teaching responsibilities. The staff interviewed reported that in carrying a large but invisible workload, they were unable to devote time to research or similar activities and that they perceived this disadvantaged them in promotion. Two if the interviewees reported that the issue of research and workload had now been recognised by their departments and strategies were being put in place to address this.

Conclusions

While the issues noted by the academics interviewed may reflect an understandable degree of self interest, the concerns they raise would suggest that in some academic cultures, professional practice may not be valued equally with other forms of university teaching. While educational research would support claims as to the benefits of experience based learning, the individual teaching and learning beliefs of academics have a considerable influence in any discussion as to the worth of particular curricula. In the competitive funding environment of today's universities such differential values can have significant consequences for curriculum planning.

Clearly this research is limited in that it has considered only professional practice curricula in the health science disciplines and only from courses offered at one university. Moreover the courses considered all used similar variants of professional practice curricula - parallel complementary learning experiences. However, analysis of the intended and assessed learning outcomes for these professional practice courses would support the view that student learning outcomes in such curricula are consistent with the high level learning outcomes valued by universities. While such a finding would be predicted based on the research literature dealing with experience based learning, it is hoped that evidence drawn from university assessment tasks will provide an additional perhaps more relevant source of evidence to demonstrate the worth of professional practice in university curricula.
References


