Innovations in Allied Health Fieldwork Education
A Critical Appraisal

Lindy McAllister, Margo Paterson, Joy Higgs and Christine Bithell (Eds.)

SensePublishers
Innovations in Allied Health Fieldwork Education
PRACTICE, EDUCATION WORK AND SOCIETY
Volume 4

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A Critical Appraisal

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This series examines research, theory and practice in the context of university education, professional practice, work and society. Rather than focusing on a single topic the series examines areas where two or more of these arenas come together. Themes that will be explored in the series include: university education of professions, society expectations of professional practice, professional practice workplaces and strategies for investigating each of these areas. There are many challenges facing researchers, educators, practitioners and students in today’s practice worlds. The authors in this series bring a wealth of practice wisdom and experience to examine these issues, share their practice knowledge, report research into strategies that address these challenges, share approaches to working and learning and raise yet more questions.

The conversations conducted in the series will contribute to expanding the discourse around the way people encounter and experience practice, education, work and society.

Joy Higgs, Charles Sturt University, Australia
FOREWORD

Fieldwork education is critically important to the education of professionals and their preparation for the workplace. Fieldwork education challenges students to transform their propositional (book or theoretical) knowledge into professional craft knowledge (the knowledge of how professionals get things done in practice) (Titchen & Ersser, 2001). Fieldwork education is primarily where professional identity is shaped and personal identity is challenged and extended. It is in fieldwork education settings that the many generic attributes required for successful professional practice develop more fully: capabilities such as teamwork, time management, prioritisation, conflict management and high-level communication skills.

Fieldwork education involves many stakeholders; not only students and their fieldwork educators, but also academic staff who help prepare students for entering practice settings, fieldwork education program managers at universities and in workplaces, other professionals who deliver client care in the work settings in which students are placed or who manage such settings, and, most importantly, the clients themselves and their family and carer networks. The rewards for individual staff and agencies engaged in fieldwork education are many, as are the issues and challenges they must face.

THE PURPOSE AND SCOPE OF THIS BOOK

Learning in the workplace, in professional practice or “in the field” has long been part of the education of health professionals. Today such learning is both highly valued and highly problematic, for many reasons including high workloads, the high cost of healthcare with limited time for “distractions” such as teaching students, and issues of accountability, litigation and quality assurance. In this context educators and practitioners, alongside researchers and managers, are asking the question: How can fieldwork education for health professionals move into the next era of innovative, sustainable as well as pedagogically sound educational programs and practices?

In several key articles (McAllister 2005a, 2005b), issues and challenges impacting on fieldwork education have been examined. These include changes to workplaces, changes in professional-entry education, the standards required by organisations accrediting university programs and registering or licensing graduates for practice, use of outdated approaches to fieldwork education, lack of preparation and support for fieldwork educators, systemic issues creating a shortage of fieldwork places, lack of funding for fieldwork, unrealistic expectations for new graduates, differences in philosophies and principles of fieldwork education, the need to focus on quality as well as quantity in fieldwork placements, and a need to view fieldwork education as a continuum from preparatory work in the classroom to actual practice in the field. From this work three key observations were made. First, there were few mechanisms for the sharing of innovations in fieldwork education. Second, the
discourse around issues in fieldwork education was largely around quantity (getting more placements) rather than quality in those placements. Third, published research or evaluation of fieldwork education was scant, especially in comparison to research in the clinical aspects of the allied health professions. Based on these observations Lindy McAllister invited her colleagues Margo Paterson, Joy Higgs and Chris Bithell to produce a book that examined both the issues and the solutions or innovations that have emerged to address them.

This book presents innovations in fieldwork education that have been critically appraised or evaluated, and that could be used to create standards for fieldwork education and deliver high-quality learning experiences for students and staff engaged in fieldwork education. Because of the similarities in values, approaches and issues in fieldwork education shared by the allied health professions of occupational therapy, physiotherapy and speech language pathology, it made sense to have a book that shared innovations in these disciplines, so that fieldwork educators or managers in any one discipline could learn from developments in other disciplines.

The book presents international perspectives on fieldwork education, partly because preparing graduates for international mobility is increasingly important and partly because the ways in which programs around the world have addressed local concerns and needs point to new possibilities for programs in other countries grappling with similar issues. The four editors of this book are all leaders in fieldwork education in their disciplines in their own countries and internationally, and have been able to identify contributors and exemplars of innovation and best practice around the world, from English-speaking and non-English-speaking countries. In presenting innovations that have been critically evaluated, this book, with its international, interdisciplinary flavour, makes a unique contribution to the fieldwork education literature.

TERMINOLOGY

We acknowledge that two of the three professions which are the focus of this book have different names in different countries. Australia uses speech pathologist where the U.S. uses speech language pathologist and the U.K. uses speech and language therapist. Physiotherapists in Australia and the U.K. are physical therapists in North America. For consistency, we have chosen to use the terms occupational therapist (which seems to be a worldwide term for that profession), speech language pathologist and physiotherapist.

As noted earlier, we use the term fieldwork education rather than clinical education, as it more appropriately describes the continuum of settings in which students obtain professional experience outside medical (clinical) settings. This term has been used in occupational therapy for some time, but may be new to some speech language pathologists and physiotherapists whose professions use the term clinical education.

The terms used to describe bodies which “approve” university education programs and the processes used to approve such programs, and then approve their graduates vary considerably within and between countries. The terms licensure, credentialing
and registration are used in different chapters, depending on the country of origin of authors or literature sources used.

STRUCTURE OF THIS BOOK

This book addresses major areas of innovation in fieldwork education in 9 sections. Section 1, Fieldwork education: Students, settings and populations, explores changing student populations, expectations of new graduates, workforce needs and strategies for enhancing the student experience, fieldwork education in non-traditional settings or with emerging client groups and community settings, and the provision of international fieldwork experiences in which students travel to placements outside their home country.

Section 2 is concerned with Design and management of fieldwork education. In this section we highlight issues in fieldwork education management, and the special skills needed to manage fieldwork education programs, alongside the frequent lack of knowledge, preparation and standards for effective fieldwork education management. We examine how business, governance, educational and service models can help assure quality standards in the delivery of fieldwork.

In Section 3, Models of fieldwork education and supervision, we consider the influences and contextual factors that can shape fieldwork education experiences, and the different types of fieldwork education programs that involve collaborative partnerships between universities and community agencies to provide new opportunities for student learning and service delivery. The importance of reflection and peer learning are highlighted in this section.

Section 4, Using information and communication technology in fieldwork education, presents a series of case studies to illustrate the opportunities that video-conferencing and new Web 2 technologies can offer to extend and support student learning, and to take fieldwork education into new settings.

Section 5, Alternatives to practice in the field, considers the continuum of fieldwork education from classroom and distance learning to real-world settings, using service learning, case-based teaching in the classroom and standardised patients as exemplars.

In Section 6, Interprofessional fieldwork education, we distil lessons learned from several programs that have undertaken extensive development and research in interprofessional learning. Issues of managing and sustaining such programs and ensuring that discipline-specific and student-specific learning outcomes are achieved, as well as interprofessional learning outcomes, are addressed.

In Section 7 we consider Student assessment in fieldwork education and discuss the challenges of assessing student performance in fieldwork settings, including achieving validity, reliability and authenticity, making quality judgements, providing formative and summative feedback, and using reflective self-assessment and peer feedback as well formal assessment by fieldwork educators.

Section 8, Preparation and support of fieldwork educators and managers, highlights the longstanding problem of lack of attention to these two important
stakeholder groups. This section describes two approaches, both of which target fieldwork educators as well as managers (an often under-prepared stakeholder group in fieldwork education). One approach uses a formal program delivered in group mode, the other a workplace-based approach using mentoring and peer support.

In Section 9, **Preparation and support of students for fieldwork education**, we focus on strategies to prepare students for the increasingly common usage in fieldwork settings of peer learning, effective orientation of students to fieldwork settings, and the range of support provided to students from non-academic units of universities, which enable students and their fieldwork educators to undertake effective education programs.

In the chapters that follow, we present many examples, critiques, reflections and evaluations of fieldwork innovation. We hope the book will engage readers and stimulate further inquiry, research and innovation in fieldwork education.

**REFERENCES**


1. INNOVATIONS IN FIELDWORK EDUCATION

Current Trends and Future Directions

Fieldwork education is a core learning endeavour within health professional education and it demands high quality strategies and innovative solutions to the many challenges it presents. This book, with its case studies and evaluation reports of cutting edge innovations in fieldwork education, provides a panorama of the diversity and vitality in this field of education and curriculum development. Since case studies are inherently highly situated, we present them as exemplary practice of the innovation in question and as a stimulus for further exploration and evaluation in other contexts. In this chapter we aim to draw together a synopsis of trends, challenges and lessons learned in order to point towards future directions as we currently see them.

CHALLENGES AND CONTEXTS IN FIELDWORK EDUCATION

In framing this book we remind readers that globally there is no uniformity in health professions education. Early chapters set the stage for the book by discussing the changing contexts of fieldwork education in terms of changing student demographics and changing trends in higher education which impact on fieldwork education. Four chapters (2, 11, 14 and 29) consider the implications for fieldwork education of changing student demographics and attributes. These chapters ask us to consider the adjustments required of fieldwork education programs and educators from Generation Y students, and from a student body which is more culturally diverse, perhaps older, maybe time-poor because of family commitments or part-time work, and possibly living at a distance from the university. The authors of Chapter 2 write of fluidity in terms of the levels and lengths of initial qualifying programs. Students on fieldwork education programs will be at very different ages and stages of personal and educational development. Student debt is a reality for many and it affects their priorities, adding to pressures while on placement. Boudreau’s analysis of the current generation of students (Boudreau, 2008), presuming this to mean those of traditional college age, known as Generation Y, or the Net Generation (Oblinger & Oblinger, 2005), described them as confident multitaskers and users of ICT, highly interactive and enjoying experiential and participatory learning but easily distracted and wanting immediate feedback. As one of the authors of Chapter 2 states, such student characteristics will determine the types of learning experience that are
appropriate and moreover the impact of professional socialisation processes upon them, a factor as yet unknown.

Challenges for fieldwork educators and their employing agencies may not be well understood by students and the universities from which they come. These challenges include:

- balancing the dual demands of student education with those of providing high quality client care
- ensuring that productivity targets in departments are not compromised by time directed to student teaching
- ensuring that income to agencies through health insurer reimbursements is not compromised by student delivery of services
- providing good learning experiences for students when models of client care are rapidly changing and may not meet the criteria for the types of placement requested by universities
- identifying adequate numbers of placements for an ever-growing number of students while not allowing fieldwork managers and educators to become burnt out
- dealing with the consequences of rapid turnover of staff, as well as providing space and other resources for students on site.

These challenges and other issues are addressed in Chapter 6.

The responses of workplaces to these growing pressures may be to withdraw from the provision of fieldwork placements or to reduce the number of placements offered. However, such reactions run the great risk of removing the long-established benefits of fieldwork education. Through fieldwork, students develop professional identities and competencies, particularly the ability to problem-solve and make professional decisions in unpredictable and complex human situations. Indeed, many agencies recognise the multiple benefits and rewards for staff and employers which students afford. These include contributions to the continued learning of staff through having to explain their practice or through professional development offered by universities for fieldwork educators (Ballinger & Diesen, 1994), improved staff morale, improved client throughput in well-designed fieldwork education programs (Ladyshewsky, Barrie, & Drake, 1998), and improved recruitment of new graduates. This last is particularly important in areas that suffer a chronic staff shortage, such as rural and remote areas and disability services (Iacono, Johnson, Humphreys, & McAllister, 2007).

With the need to produce the highest quality graduates possible to work in complex and rapidly changing workplaces, and the need to respond to issues and challenges in fieldwork education described above, university programs must be innovative in how they design, deliver and evaluate fieldwork education. The numerous drivers of innovation in fieldwork education include reduced funding, shrinking numbers of traditional fieldwork education placements, increasing student numbers, workplace demands, as well as client needs. Another driver is the desire of universities to market unique aspects of their programs in order to attract students in a competitive market. These and other drivers of innovation in fieldwork education are explored in more detail in Chapters 6 and 16.
CURRENT TRENDS IN FIELDWORK EDUCATION

Changes in Higher Education

Chapter 3 refers to the nexus between the university and the workplace as a key locus where current and future developments cluster. Partnership in the provision of fieldwork placements has always been essential, but the strengthening of this collaboration is driven by the requirements of a developing pedagogy of fieldwork education, and by profound and as yet not fully realised changes in the workplace. The authors identify four changes in higher education which influence fieldwork education. These are:

– changing approaches to teaching and learning
– expectations for new graduates in terms of evidence-based practice, high levels of competence, interprofessional and team practice, international mobility and meeting workforce needs
– requirements in terms of student numbers, funding, and policy compliance
– ways of enhancing students’ experiences.

Strategies for enhancing the learning experience for students on fieldwork placements are also provided in Chapter 29. Over the last two decades international placements have become increasingly common in allied health professions. One driver for this is the pragmatic need to find additional placements, but more pedagogically sound drivers are the need to develop intercultural competence and preparation for international mobility amongst graduates. Intercultural skills developed in international placements are transferable back to the increasingly diverse domestic settings in which students and graduates in the Western world will work. The challenges and rewards of international placements are specifically addressed in Chapter 5.

New Conceptions of Fieldwork Pedagogy

There is a developing pedagogy of fieldwork education, with newer theoretical constructs no longer dependent on understandings developed in the classroom. It is now well accepted that knowledge for clinical practice requires an integration between the propositional knowledge and research-based evidence learned in the classroom and professional craft knowledge derived from practice. The value of experiential learning that leads to ways of knowing and learning in practice is now well supported by research and theory, and embedded into practice by a number of different means. Examples in this book include Chapter 12, which explores the increasing adoption of learning portfolios as a means of promoting reflection on practice to promote transformative learning, although the authors comment on the detrimental effects of assessment as a function of the portfolio unless handled carefully. The use of different methods of peer learning to foster learning with and from others and to facilitate experiential learning through the use of open questions and a non-judgmental style is explained in Chapter 13.

Changes in the Workplace

Health services demand not only that newly qualified graduates are safe and effective practitioners, able to manage their own caseloads, but also that they are better
prepared to cope with the complex realities of becoming members of the workforce, equipped with a broader set of generic skills. New understandings of the role of fieldwork educators as managers of student learning experiences as a whole include designing placements, in collaboration with academic placement coordinators. The goal of these collaborations is to ensure that students develop the capabilities needed for employment, including independence and autonomy, teamwork, caseload management and communication skills, in addition to the clinical skills specific to their profession. In some places a specialist educator role has developed in response to these challenges, and everywhere the quality of the collaboration between academic placement coordinators and fieldwork educators is recognised as vital to the success of placements.

Schön (1987) catalysed intense interest in developing reflective practitioners, and the health professions quickly embraced reflection as both a learning strategy and outcome. Reflection was not always thoughtfully promoted or facilitated in students, and this book aims to provide not only innovations in the use of reflection in fieldwork education (Chapters 12, 17, 23 and 26), but also theoretical foundations for reflection and approaches to enabling students to reflect meaningfully and critically (Chapter 12). Chapter 26 discusses the use of reflection in the professional development of fieldwork educators.

Health systems in all developed countries have come under increased pressure as aging populations, expensive new technologies, increasing patient expectations and affluence change the profile of health and disease and generally increase the demand on the scarce resources – resources that are set to decrease further as a result of recent challenges to world economies. Disadvantaged or remote populations fare less well than urban or affluent populations under such circumstances. The scope of fieldwork placements is diversifying into non-traditional locations, often as a means of “re-engineering” healthcare provision, or encouraging graduates to take up their first posts in under-subscribed localities and services. Chapter 10 describes a fieldwork experience for speech language pathology students in schools in rural areas where no services currently exist, as a means of modelling the direction of change needed and encouraging students to show initiative and creativity, as well as challenging their strong sense of legitimate, medically oriented practice. In Chapter 4, three non-traditional placements are described that enable students to work with groups not normally encountered and to realise that they could devise appropriate services and derive personal satisfaction from working in new ways in relatively unstructured environments. The success of such placements depends upon careful planning and support for students, particularly those for whom lack of structure is a greater challenge.

**Diversification of Placement Models**

Many chapters consider well-established as well as new models and approaches to fieldwork education, particularly Chapter 9 which, in addition to reviewing curriculum-based, developmental and collaborative models of fieldwork education, also examines factors influencing the design of fieldwork placements. Consideration of
such factors is illustrated in the design of a new fieldwork placement included as a case study. The move from apprenticeship models of fieldwork education to experiential but facilitated and supported learning is discussed in Chapters 3, 4, 5, 11 and 16. In Chapter 11, immersion in the field from day one is contrasted with the gradual introduction to fieldwork education outlined in many other chapters. The view that the unquestioned “gold standard” for professional education is actual placement in real-world field settings is shifting, and this changing perspective opens up the use of many different approaches to teaching and learning along the continuum from the classroom to the field (Chapter 15). Approaches considered include problem-based learning (Chapter 3), case-based teaching in the classroom (Chapter 16), project placements (Chapter 3), simulations and standardised patients (Chapters 3 and 17), service learning and volunteer placements (domestic or international) (Chapters 16 and 5), whole-of-course internships and situated learning (Chapter 11).

Models of placement supervision have become increasingly heterogeneous for a number of reasons, but chiefly due to shortage of placements and the resulting diversification of placement supply. We suggest that previously the model of supervision was a taken for granted concept and given no serious consideration. However, attempts to increase the number of placements led to testing of collaborative models of 2:1 and 3:1 student:supervisor ratios compared with the 1:1 ratio that many then considered ideal. In one study (Moore, Morris, Crouch, & Martin, 2003) 2:1 was considered the best compromise, giving sufficient individual supervision to each student as well as time to learn together. Time for 1:1 supervision and careful planning and preparation for the placement were found to be essential for a successful outcome. However, the most important finding from this and other studies was the benefit of peer learning for collaborative placements.

In the past, resistance to placement of more than one student with a fieldwork educator was considerable in some disciplines and in some countries where the old apprenticeship model of fieldwork education dominated, with one (apprentice/novice) student learning from one master, expert clinician. Economic as well as pedagogical drivers have seen increasing adoption of peer learning as an effective teaching and learning strategy in fieldwork education. When economic considerations are the major drivers for creating more placements this has sometimes led to ill-considered adoption of peer learning approaches. The benefits, risks and management issues in peer learning in fieldwork are considered in many chapters, notably Chapters 3, 9, 10, 13, 23, 26 and 27. Chapter 13 presents two perspectives on the usefulness of peer learning: as an activity-based approach where peers do things together and this creates learning opportunities; and as a dialogic tool where through discussion students can support and extend each other’s learning. In combination, careful planning of peer learning activities and education of students in how to dialogically explore their learning can powerfully enhance peer learning in fieldwork education.

Pairing students of different levels and types can create problems if not well managed, as discussed in Chapters 21, 23, and 26. Data reported in Chapter 23 from senior students paired with more junior students showed that the senior students...
were not as satisfied with the experience as were the junior students. The need to prepare students to make the most of peer learning opportunities is addressed in Chapter 27.

The need to diversify placement provision has stimulated other innovations such as university-based clinics, presented in Chapter 8, where the pitfalls of attempting to provide a health service in a non-healthcare environment and guidelines for success are explained. Placements in non-traditional locations where services do not exist may require new models of intermittent supervision or reliance on communication technology. Students might not be managing a traditional caseload but instead might be engaged in a project which will benefit the placement host in some defined way. Such placements are likely to succeed when there is potential for reciprocal benefit for both the placement site and the student, which has been discussed and agreed before the placement begins; where written affiliation agreements are in place; and where students’ learning goals and reflective assignments are designed to guide and enhance their placement experience.

International placements, or study abroad programs, have increased in quantity and diversity, and work best when they fulfil the aims of both home and overseas institutions. Development of intercultural understandings is of value in increasingly multicultural societies in home countries, and graduates increasingly need to be able to demonstrate international credibility. Chapter 5 describes the use of an international placement as a means of developing interprofessional teamwork. Finally, simulations, including standardised patients, both in the classroom and virtually by means of distance technologies, have been used as adjuncts and alternatives to fieldwork education. Such experiences can strengthen experiential learning in the curriculum while compensating for shortages of placements, or extending students’ experience into areas they otherwise could not access, such as rural and remote areas or small specialist units offering few placements. A strong case can be made for using simulations or real patients as a means of controlled exposure to build students’ confidence and reasoning skills, either individually or as a means of collaborative peer learning as they carry out group interviews.

**Interprofessional Fieldwork Education**

The requirement of health professionals to engage in interprofessional practice has driven (and in turn been shaped by) interprofessional education (IPE) of students. Section 6 of the book is devoted to interprofessional fieldwork education. IPE has many benefits for students, disciplines, workplaces and ultimately clients. But the development, implementation, and sustainability of sound IPE programs is fraught with barriers and often logistically difficult and costly in terms of time, staffing and resourcing. It can also be a challenge to obtain support for such programs from students and staff when they are seen as an “add-on” to existing fieldwork education programs, especially if not formally assessed. Chapters 18 and 20 describe successful IPE programs sustained over considerable periods of time. Chapter 19, on the other hand, describes the challenges to sustainability of an IPE program which ultimately led to its discontinuation, but with embedding of the IPE learning
innovations in fieldwork education

objectives and activities it had generated (such as shadowing a health professional from another discipline) into more routine fieldwork education within disciplines. Chapters 18 and 20 provide examples of rigorous evaluation of learning outcomes and program delivery and management, drawing upon several years of research and evaluation.

Collaborative practice is the essence of interprofessional teamwork, a concept extended to intraprofessional working with support personnel of the same profession in Chapter 21. Lessons learned include the value of key personnel such as an on-site coordinator; the need for additional resources to compensate for the time, space and management support that is required; and the importance of a pragmatic approach to overcome logistical difficulties. Many of the projects need to begin with good interprofessional work both among the educators and practitioners involved, as well as in the service units that will be the site for the placement. This entails staff development activities, that can include distance technologies, to reach the necessary understanding and commitment to foster a supportive interprofessional culture among those who must model an interprofessional team. Student learning is best served by explicit learning outcomes that are congruent with authentic active learning and assessment activities. Although examples of projects are numerous, sustainability has become a concern as projects come to an end and resources are withdrawn. Where there has been transformation of attitudes, beliefs and behaviours through change processes within the faculty and the clinical site, and continuing support from management at all levels, the chances of sustainability are higher.

With the development of IPE, partnership and service learning approaches to fieldwork education, a concomitant development is the education and supervision of students by professionals from disciplines other than those to which students on placements belong. For many decades there was resistance to cross-disciplinary or interdisciplinary supervision, with some disciplines, professions (and sometimes students) arguing that students could learn only from experts in their own fields. The shift in focus from illness to wellness models of care, the gradual move of health service delivery from medical settings to community and domiciliary settings, as well as interprofessional practice in those settings, together with the use of role-emerging placements in settings where disciplines are not currently present (such as those described in Chapters 4, 5, 9 and 16), further necessitate cross-disciplinary supervision on-site, sometimes supplemented with university-based educator support (as described in Chapter 9). Although there may be initial anxiety about supervision from someone outside a student’s discipline, Chapters 5 and 10 suggest that students come to appreciate the unique learning this can offer.

Work Readiness

High expectations for graduates and the growing demand for graduates to be “work ready” are driving many innovations in fieldwork education that immerse students in the workplace from early in their programs of study (Chapter 11), or that utilise learning and teaching approaches which exemplify features of contemporary workplaces. Approaches that construct learning as a social and collaborative activity,
emphasise experiential learning, require students to own their learning and truly participate in work tasks, are described in Chapters 10, 11, 12. A theme in Section 3 is the need to provide structure, facilitation and support for students learning in more experiential and non-traditional models. Chapters 10 and 20 note the opportunities that innovation in fieldwork education offers in terms of shaping the future directions of classroom education as well as practice.

Student Assessment

No book on fieldwork education would be complete without discussion of assessment of student learning and performance. Assessment provides important feedback to students about their performance, learning needs and achievements, and to universities about the impact of their curricula and fieldwork programs. Moreover, assessment identifies those students ready to graduate and able to practise safely. The gatekeeper role which fieldwork educators undertake on behalf of the professions and society in assessing students’ readiness for independent practice is a major source of anxiety for these educators. They need well-designed, valid, reliable, easy to use and efficient assessment tools in order to make sound judgments of student performance.

The challenges of assessing students’ competence to practice with authenticity and in ways that do not impact negatively on learning are tackled in Chapters 22, 23 and 24. The authors rightly reject reductionism as a means to greater objectivity and determine that judgment either of observed performance, or of an oral discussion, is a valid discriminator and aligns well with real-life contexts and authentic assessment methods. Competency-based approaches to performance assessment must, authors argue, include assessment of a range of skills, but most importantly must encompass the processes required to practise in complex workplace environments, including generic skills such as reasoning and communication. Chapter 24 considers oral assessment as a complement to performance assessment, and discusses the benefits of oral assessment which specifically targets thinking processes based on a discussion of students’ current caseloads, so possessing a high degree of authenticity in relation to real patients, but also perceived by students to be closely aligned with the professional communication skills required in practice. The authors emphasise the importance of gaining student perspectives on assessment design. Fairness and transparency are paramount, but not at the expense of assessing authentic processes of practice, a condition which the students in these studies appear to understand and accept.

The principles of good assessment of fieldwork performance are discussed in Chapter 22. This chapter presents COMPASS®, a tool for assessment of clinical competence in speech language pathology students (McAllister, Lincoln, Ferguson, & McAllister, 2006) as an example of a user-friendly, highly valid and reliable assessment tool, which can be used to provide formative as well as summative assessment feedback. This tool addresses concerns for authenticity in assessment, also raised in Chapter 24. The next stage in the research program using this tool is benchmarking programs and models of fieldwork education to begin to answer
recurrent questions of quantity versus quality in fieldwork education, and timing and impact of different fieldwork education experiences across the continuum of student preparation.

To be able to engage in lifelong learning graduates need to have developed the capacity to self-assess and to provide feedback to peers to assist in their lifelong learning. Chapter 23 discusses approaches to fostering self- and peer assessment using reflective strategies, and considers the alignment between self, peer and supervisor assessment, which is important for realistically judging performance and subsequent learning needs.

**Partnerships and Collaborations**

The increasing use of partnerships and collaborations to meet both community needs, including the needs of unserved or under-serviced populations, and the need to generate more student placements is considered in Chapters 4, 5, 8, 9, and 10. The authors of Chapter 10 use the term “community responsive engaged learning” to define their dual approach to fieldwork education of students and service to clients (defined in the broadest terms), and describe how they educate students and serve the community using a non-impairment-focused approach to practice, notions that accord with discussions in Chapter 2 of a social ecological model for framing fieldwork and practice.

**The Impact of Information and Communication Technology**

Existing and emerging models and strategies in fieldwork education will be rapidly shaped by the increasing uptake of information and communication technologies (ICT). The capacity of ICT to allow real-time interaction of students and fieldwork educators who are remote from each other will open up new locations for fieldwork education and new approaches to teaching and learning. Chapter 29 shows how ICT can be used to enhance and support students whose fieldwork placements are remote from their campuses. Chapters 14 and 15 consider some of the opportunities currently available and the barriers and issues inherent in using ICT in fieldwork education. Many of these are the same as those that need to be attended to in the delivery of telehealth services (Dunkley, Pattie, Wilson, & McAllister, in press). These systemic and technical barriers, attitudinal issues, cultural concerns and the need to protect student/client privacy and confidentiality need to be addressed before ICT has significant uptake in fieldwork education.

**Management of Fieldwork Placement Systems**

The focus of this book has largely been on students and fieldwork educators. Although we have discussed challenges for fieldwork education managers we have not directed a great deal of attention to models of fieldwork management. One powerful but under-utilised model for assisting educators to think about and manage fieldwork experiences is the teacher-as-manager model (Romanini & Higgs, 1991).
Chapter 28 reports use of this model as the basis for preparing students for fieldwork, an application worthy of further exploration.

*Preparation for Fieldwork Educators and Students*

Preparation of staff and students for fieldwork education is a key topic in this book. The use of different approaches to efficiently and effectively prepare students before they commence fieldwork is discussed in a range of Chapters, with in-depth discussion of preparing students for peer learning occurring in Chapter 27 and orientation to fieldwork placements considered in Chapter 28. Much of the guidance on preparation of students for peer learning placements in Chapter 27 may be usefully generalised to all placements, as many students are in groups on placement, either of their own profession or increasingly of other professions at the site at the same time. Learning the skills of peer learning not only enriches their placement learning but will build the social skills for collegiate relationships and teamwork as qualified professionals.

The lack of preparation of clinicians to be fieldwork educators has long been noted (Higgs & McAllister, 2007) and consequently we have included several chapters to address this topic (Chapters 25, 26, 28, and 29). Chapters 25 and 26 present advanced professional development programs for fieldwork educators. Chapter 25 describes a formal program running for more than a decade that is grounded in principles of evidence-based education and adult learning, using an interprofessional approach which models good teaching and learning practices as it educates participants about these approaches. Chapter 26 describes a less formal workplace-based approach, also grounded in educational theory. This chapter describes peer mentoring and support strategies used to prepare new fieldwork educators who are in the process of developing clinical expertise.

Preparation of those staff, typically based in universities, who manage fieldwork education programs is also lacking. Chapter 7 considers the special organisational, problem-solving, negotiation and conflict resolution skills required to undertake this management role. For most fieldwork education managers, learning the role and developing the skills needed happens “on the job”. Some preparation programs do exist, and Chapters 25 and 26 provide examples of formal and informal preparation programs for fieldwork education managers. Chapter 25 presents an interprofessional program for fieldwork managers designed around the five themes of exploring expertise in professional practice as well as educational practice, creating learning relationships, managing learning programs and resources, and finally focusing on the role of personal knowledge in the fieldwork management role.

Face-to-face programs for fieldwork educators must demonstrate the learning approaches required in fieldwork education, such as role-modelling, the importance of relationships in person-centred approaches, and the application of the theories of adult learning. Programs need to teach the methods of learning from experience and the skills of reflection, as well as of learning from research, for those whose education may have pre-dated widespread adoption of these now core outcomes. Although on-line fieldwork educator programs can be added for those in rural and
remote settings or otherwise unable to access face-to-face programs, learners often express a preference for a moderator to give feedback, demonstrating the value of human interaction when addressing such a person-centred topic.

FUTURE DIRECTIONS IN FIELDWORK EDUCATION

To adapt the words of Thorne (2006) writing about key issues for 21st century nurse education, the core business for allied health professional educators is the preparation of the next generation of graduates to take their places in a world order that we can only begin to comprehend while ensuring that our core values are retained. Our values include a strong belief that fieldwork education must be based on sound educational principles, an evidence base derived from experiential learning, and attention to the scope and diversity of current and future practice. Fieldwork education is already adopting a wide range of non-traditional placement models that are pushing at the boundaries of what have previously been regarded as appropriate placements. Diversity will continue to increase as health services reach out to new client groups and hard-to-reach populations. Public health agendas to improve the health and wellbeing of populations will add an extra dimension to the provision of services for many professions and bring further diversity to placement provision. Rural and remote communities will benefit from advances in telemedicine, and students on placements where videoconferencing and Web-based technologies become the norm for receiving learning support will have valuable experience of their use.

Placement shortages are likely to continue as health services personnel come under more pressure to increase productivity. With further testing and evaluation it seems likely that simulations and technologically-based solutions will become increasingly trusted to increase exposure to experiential learning without direct patient contact, although work-based learning will remain crucial for the development of authentic practice-based skills and the opportunities for professional socialisation into a distinctive professional culture. Expanding placement capacity would be assisted by further research into the service contribution made by students on placement as well as the less tangible benefits to staff development and service quality.

Paradoxically, the value of work-based placements in health and other higher education programs has recently attracted government attention in a number of countries. Universities must see that graduates are more effectively prepared to enter the workforce able to deal with the complex realities of working environments. In Australia the state of Victoria is proposing an overall workforce strategy that will engage with placement arrangements for the first time, including providing funding, as well as planning for increased placement capacity and quality. The impact of such centralising changes has yet to be felt but it seems likely that other national bodies may follow suit. If placement provision becomes more centrally planned and administered, it will be important to retain the creativity and flexibility that can optimise learning outcomes currently possible in a locally managed placement system.
Student characteristics as members of Generation Y predispose to the enthusiastic acceptance of distance technologies and the possibilities of Web 2.0 tools that will open the way for interactive learning in flexible and geographically diverse locations. Provided that current barriers such as institutional firewalls and limited access to computers and the Internet can be overcome, the dream of true integration between the student experience at university, with its access to knowledge and evidence, and placement experience where real-world access to patients occurs, can become a reality. Curricula at entry level and continuing professional development for qualified staff will need to develop the skills required to engage with technology at all levels.

Preparation of fieldwork educators needs to expand and accelerate. Setting of standards and accreditation of educators are occurring in some places but change is slow. Pressures on staff time are such that programs of educator preparation must compete with other seemingly more urgent staff development needs. Newer initiatives may be difficult to roll out where staff are not prepared. Increasing uptake of programs of educator preparation that are delivered by electronic means would assist those who are time-poor or located in remote areas.

There are still numerous under-researched topics in the evidence base where further work is needed. Moreover, word limits have prevented coverage of many important topics in this book. We note a few topics here to stimulate future research and innovative practices:

- early identification and effective support for students who experience difficulty in fieldwork settings
- the perspectives of clients as major stakeholders in fieldwork education and the impact of students on them
- the changing demographics and work patterns of allied health professionals, and recruitment problems, increasing specialisation and mobility of the allied health workforce
- the types of placements that can maximise student learning outcomes at different points in their programs and the efficacy of different models of fieldwork education and supervision, in the face of expanding student numbers
- understanding if and how supervision actually makes a difference to student learning. This book suggests that peer learning and remote and cross-disciplinary supervision can facilitate effective student learning without direct supervision, so what then is the need, role and timing for effective supervision?

CONCLUSION

In 1997, Hagler, McFarlane, and McAllister identified six priority areas for research in fieldwork education: educator-student relationships, curriculum design, efficacy of models of fieldwork education, predictors of success, the economics of fieldwork education and assessment tools. These have been addressed in this book but continuing research in allied health fieldwork education remains a high priority.
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SECTION I: FIELDWORK EDUCATION: STUDENTS, SETTINGS AND POPULATIONS
2. TRENDS IN HEALTH PROFESSIONAL EDUCATION

Changing Student Populations

This chapter focuses on current trends impacting on professional education and provides a critical, interprofessional appraisal of these trends. Of necessity, the word “trend” denotes general tendencies, often in an upward direction, rather than hard facts. In fact the whole scene in both professional education and in descriptors of student populations is in a ferment of perpetual change, more so now than ever before. As you read this chapter and this book you must be a reader who is comfortable with the impermanence of knowledge and facts, realising that they are temporary, dynamic, constantly changing and therefore, of necessity, problematic and interesting enough to debate and to study (Fish & Twinn, 1995).

In this chapter we address some of the factors in these trends that we consider significant. First, we want to authenticate our credentials for writing an account about international trends. Second, we want to shine a different beam of light on the criticality that we believe needs to be applied to the literature and research about professional practice education and, indeed, on being “a professional” in these ever-changing times. By illustrating these complexities in a conceptual model (Figure 2.1) we want to give you a tool against which you can analyse and interpret your own professional educational scene, as well as compare your own experience with that of others from different parts of the world. Then, we examine the impact that credentialing could have on the professional orientation, level of reasoning and behaviours of students emerging from very different educational experiences. Finally, we consider the effects of all these external influences on the current “Generation Y” student population in two countries, Australia and Ireland, as their attitudes and behaviours also impact on professionalism.

The Authors’ Backgrounds

One of the requisites in any subjective account is the credibility of the authors and the perceived social relationship they have with each other, as well as with the conditional relationship they are attempting to develop with you, the reader! Bearing these factors in mind we want to tell you a little about our professional and international backgrounds and how they have come to merge together and influence writing this account. Both authors have been educators for many years and both are lifelong learners who studied for their successive higher degrees as mature students. The following two vignettes introduce you to our international and professional experiences.

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VIGNETTE 1: SUSAN’S STORY
Susan entered the profession of occupational therapy as a mature-aged student. She had lived in England, Ireland, India and Malaysia before she started studying occupational therapy at the University of Sydney, Australia. Her previous work background included teaching her own children in India and children with intellectual disabilities in Malaysia. Susan worked as an unqualified occupational therapy assistant in a large teaching hospital in Sydney before her course. She was married and had raised four children, one of whom was an adopted Tibetan daughter from another culture and religion. Despite this rich background of diverse international experiences being incorporated into her university learning, these different knowledges were not acknowledged by the university. University education in the late 1970s remained in the positivist, scientific era of thought and qualitative, interpretive work was not part of that scene. After qualification, Susan’s professional life continued to be varied and colourful. Returning to India she and an Indian counterpart designed an integrated school for children with polio and for children from very poor socioeconomic backgrounds. A 50:50 mix of children with significant disabilities and those without gave the school a unique social edge in times when the medical background for occupational therapy was very strong. After 6 years a kaleidoscope of opportunities arose. These included working in England in a day-care centre, studying for a Masters degree in the U.S. at Columbia University, and designing and leading different Masters degrees at the University of East London, U.K., where she completed her PhD. Susan ran workshops in Finland, Sweden and Belgium. Then, as Professor she designed a suite of undergraduate and postgraduate programs at University College Cork, Ireland. Susan has returned to Australia and is working at the University of Newcastle researching “Generation Y” students’ learning needs, that are different from other generations’ needs and study habits. Throughout her career Susan has been interested in researching and listening to unheard student “voices”.

VIGNETTE 2: MARGO’S STORY
Margo took a more traditional path. She started in the occupational therapy profession with a diploma and then a Bachelor degree in occupational therapy (BScOT). She thought that she was “set for life” with the necessary credentials to carry out her career. Initially she worked for 2 years in Canada as a therapist in a rehabilitation setting. Then she travelled overland through Europe and Asia, working in a variety of jobs, and ended up working clinically as an occupational therapist in Australia in vocational rehabilitation and acute care settings. Eventually she returned to Canada to work in the community with home care clients. At this time she did not envision herself as an academic, although she supervised occupational therapy students as a preceptor in all these clinical settings. After 10 years of community practice and a period of leave to look after two young daughters, she was asked to take on the role of coordinating the fieldwork education program at Queen’s University. As this new position required academic upgrading she completed a part-time masters degree in epidemiology, while working full time at the university. Margo was responsible for fieldwork education for 10 years until she became chair of the occupational therapy program and realised that she would need additional credentials at the doctoral level. She looked at many PhD programs around the world and noticed that there was a burgeoning interest in qualitative research and in professional reasoning. Therefore she commuted from Canada to Australia to complete her doctoral degree with Professor Joy Higgs at the University of Sydney a month before her 50th birthday, giving her the unique perspective of being a mature student while affiliated with the Canadian university in an administrative role. Following this she has embraced several wonderful opportunities to work as an educational consultant in a number of countries including Hong Kong, Sri Lanka and Russia.
These two vignettes illustrate the considerable international experience we both have experienced but they also illustrate that both of us were aware of international trends, both transferred our professional knowledge between countries and both took advantage of opportunities when they presented. Having introduced ourselves, we put forward our thoughts about the changing professional trends and student populations in the following sections.

_Becoming Even More Critical but in a Different Way_

We are sure that anyone reading this chapter will be searching for new knowledge, ideas and innovations to apply to their practice or their research. Seeing things in a different light is a prerequisite for advancing professional knowledge bases. Most educational establishments, particularly those awarding higher degrees, insist that students can undertake comprehensive international database searches. This task is now so easy to accomplish if computerised data-bases are accessible, but that is not always the case in some countries. Criticality of research and its evidence for practice has long been an exhorted trend (Higgs & Titchen, 2007). However, this criticality is usually directed at the quality and integrity of the research methodologies, the researchers’ credentials and their findings. We feel strongly that there has been too little emphasis on being critical about the transferability of these research findings into different international contexts. Not enough thought has gone into considering the multiple factors that need to be identified, debated and researched. This is the thrust of this chapter. So, while we give an overview of the current trends in health professional education and the patchy trends in the changing student populations, we also want you to become critical consumers of international papers in a different way. The trend towards globalisation needs to be counteracted by an intellectually challenging rigour of scholarship.

Hegemonic assumptions are made too easily. In our experience, what works in one culture or in one profession will not necessarily work in another. Or some aspects will work and other parts will not be appropriate. This critical, analytical perspective becomes a necessity for advancing health professions’ many knowledges (Boud & Edwards, 1999), and these extra layers take our collective knowledge to a deeper level. You need to become a critical consumer of information so that you can manoeuvre your knowledge, adapt it and make it accessible and appropriate in your work context. This is indeed higher level thinking and doing, and should manifest in an altered research focus.

Different trends are evident in collaborative international research. We are starting to see international comparison studies being developed in the health professions (Paterson & Adamson, 2001; Paterson, 2003). These studies often illustrate differences but do not address the outcomes of any transferability. Now, with the advent of Web 2 research, the interconnectedness between teams of researchers brings possibilities of immediate research thoughts being brought together. The advent of telemedicine and teleconferencing brings critical discussions to other levels. All these possibilities are seemingly successful in the scientific realm of knowledge, but it is human, cultural and educational factors that appear to cause transferability or generalisability problems.
The Social Ecological Model

To illustrate the complexity of the factors we put forward in Figure 2.1 a social ecological model to conceptualise some of the main elements that need to be taken into consideration. This model recognises local and global trends and then identifies major forces that dictate change. The framework is intersectoral and multi-level. It is drawn as a fluid structure to denote changing circumstances at all levels of the physical and social environments (Higgs, Neubauer, & Higgs, 1999).

Each separate portion of the model illustrates a profound body of constructed knowledge. For example, the idea of the interactive practitioner at the centre, a concept first proposed by Higgs and Hunt in 1999, has been developed to encompass constructs from the previous two decades in a newly graduated professional of the 21st century. These include reflection, clinical reasoning development, reflexivity, person-centred care, other interpretations of science, the legitimising of qualitative research methodologies, and the notion of practice artistry rather than technical specialism. All these areas have discrete bodies of knowledge and at this point in the new millennium, an amalgam and integration needs to occur.

SCHOLARLY QUESTIONING

* Taking the concept of an interactional professional, ask various colleagues from different professions and from different countries how they interpret this phrase.
* Working from an accepted/agreed interpretation from the original authors, study the other layers in the social ecological model to see how each part is affected by the other and to understand how intermingled each stratum is. Do this with colleagues from other countries.

Figure 2.1. Social ecological model.
This complex social ecological model can be used as a basis for many different aspects of interpreting practice knowledge and practice behaviours. It can be used as a foundation for international research. Indeed, this scene is so complex that, to make sense of this information in a worldwide sense, rationalisations and professional connections have to be made. International organisations such as the World Federation of Occupational Therapists (WFOT) need to construct guidelines that seek to unify members while still incorporating local contexts (Hocking & Ness, 2005). In the next section we examine a few significant trends and change factors shown in the model that we believe you should consider in your debates.

So what are the Facts About these Changes?

We start with trying to identify the current professional entry level for the health disciplines represented in this book. We feel that it could be helpful to provide a sample of the different entry level programs (Bachelors, Masters, doctoral levels) and length of program for four disciplines: audiology (audio), occupational therapy (OT), physiotherapy (PT) and speech language pathology (SLP). In Australia, there are a number of options available for entry level programs with 3- or 4-year (embedded or add-on honours) Bachelors degrees as well as 1–2 year Masters programs in OT, PT, SLP and audio. In Canada all four disciplines’ entry level programs are 2-year Masters degrees. In Europe there are parallel tracks in both college and university programs with quite a bit of variation. In South Africa the entry level credential is a 4-year Bachelors degree and in some cases such as SLP the student must do an extra year of community service in underserviced areas. In South America the educational programs are 5-years Bachelor level. In the U.S. the trend is to move toward a professional entry level doctoral degree by 2012 for audio and 2013 for PT. SLP will remain as Masters’ entry and OT is deliberating multiple levels of entry including both Masters and doctoral level. It is possible to infer an average age of students in these programs where undergraduates are approximately 18 years of age on entry to a 3- or 4-year program and thus graduate at 21 years. In contrast, Masters level students could be 22 years or older coming into a profession-specific 2-year program and graduating at 24 years or older. It is difficult to obtain accurate statistics about gender; the majority of students in the health professions are female, although this statistic is gradually changing in English-speaking countries, whereas in many Asian countries there is definitely a higher proportion of men.

Commenting on the socioeconomic status of students is also problematic, as student funding requirements and support are variable across countries. But it is safe to say that many students graduate with significant debt loads that need to be repaid once they enter practice. Conversely, many students choose to work long hours during the course of a full-time program. This has consequences in their level of knowledge, the amount of effort put into learning, or in their health status and their work/life balance. Either way, from the student perspective, can be very difficult. For instance, a Canadian OT, PT or SLT student will pay $38,000 for 6 years at university in tuition fees alone. Most students incur other expenses with social
expenditure, housing, food and travel. Moreover, going to fieldwork education sites that are often a long way from campus can entail duplicate expenditure for housing to participate in this valuable and often compulsory learning experience. All these factors affect the depth of knowledge gained and alter students’ behaviours and priorities.

How has Credentialing Affected the Student Population in the Professions?

Depending on your location, you may or may not be aware of a profound shift in the academic level of “entry level” education in professional programs. Upwardly moving degree enhancement or academic drift started in the mid-1990s in the U.S. and has had a cascading effect on many other areas of the world. It began with the PT profession trying to keep up with the chiropractic profession which had doctoral level degrees in the U.S. The first step was to require Masters level as the basic level of education. At the time of writing this chapter, this status had been achieved and now there is a movement to upgrade again to the doctoral level as the minimum criterion by 2013. Canadian PTs followed suit with a decision that Masters level education would be the minimum entry level for PTs effective from 2009. So there has been an international domino effect, with pressure for higher and higher degree qualifications in the PT profession.

In the U.S. other professions such as audio and OT are following suit. The 1997 Commission on Education (Coppard et al., 2009) articulated eight reasons for moving to postbaccalaureate education in OT. As a result, Masters level preparation was expected as the standard entry to practice. These reasons are as follows:

1. OTs and new graduates must demonstrate an unprecedented need for advanced clinical reasoning.
2. New graduates must define and demonstrate the uniqueness of OT.
3. New graduates must view themselves and function as autonomous practitioners.
4. The environment showed readiness to move to postbaccalaureate education.
5. Postbaccalaureate education will better prepare therapists to conduct outcomes research and serve on interdisciplinary teams.
6. Many graduates of baccalaureate programs have received a Bachelor’s degree that was equivalent to a Masters degree level education.
7. Postbaccalaureate education would assist in clarifying the role between “professional and technical education”.
8. Postbaccalaureate education is in keeping with related fields. (p. 11)

The Canadian Association of OT provided a strong incentive for similar change in minimum standards with a decision that Bachelor level academic programs would not be accredited after 2010. This decision was controversial at the time, with some educators not agreeing that Masters level was necessary for educating competent therapists. This debate is continuing. In the U.K. and Ireland, as well as in Australia, there is a mix being offered at either Bachelor degree with honours or Masters level, and currently, there is no professional preference.

These changes in credentialing have been applauded in many corners but there are those, particularly government officials, who view these processes as simply
“creeping credentialing”, and have blocked or slowed the process of conversion of degree requirements. Many of these decisions have financial implications for studying and, later, for employing therapists. In some countries the desire to upgrade minimum entry level standards has been denied because their universities do not provide programs for applied professions. This raises important questions concerning the implications for each profession at the international level, for students who wish to make exchanges and therapists who wish to work in different countries after graduation. Although many of these credentialing changes are very recent it is expected that all educational programs will be reviewed by some accreditation process to evaluate the outcomes.

What Educational Approaches are most Effective with Diverse Student Populations?

An exciting aspect of these trends is much greater diversity in the student population, leading to other changes. We established at the beginning of this chapter that knowledge is so impermanent that other ways of learning which embrace uncertainty would seem to be preferred. There is thus a trend towards using different educational approaches such as inquiry-based learning (IBL) or problem-based learning (PBL) (ENOTHE, 2004) rather than the more traditional approaches which fix a more permanent knowledge marker. ENOTHE argues that student-centred, self-directed teaching and learning are prerequisites for developing lifelong learners. Also, the inductive IBL/PBL methods should create independent creative thinkers who have the capability of moving their professions forward. Higher level awards are thus creating practitioners who are wider in their interpretations and who are also more critical and research minded, and who will incorporate research and evidence into their ongoing practice (Strzelecki, 2009).

Students are older and, we expect, more mature if they have four years of generic education, and many have additional years of life experience before they begin their professional program, as Susan had when she entered the university. There are other advantages to widening access to education programming, as some students are not firm in their career choices until they have completed their undergraduate degree or, as in many cases, have worked in related fields and come into the health disciplines as mature students. Shanahan (2000), interviewing mature students in the U.K., indicated that the “experience of life and the world of work is stated as one of the great advantages of being a mature student, and one that adds to their level of confidence as they prepare to qualify and enter the workforce” (p. 153). However, raising the age bar may exclude other groups of potential students, such as those who could not afford or would be frightened at the thought of 6 years of tertiary study unless specific arrangements are made such as bridging or access courses. There are a great many other arguments in favour of widening access for these seemingly disadvantaged groups, as they bring with them cultural and ethnic richness (Boylan, 2001) as well as possibly being more representative of the potential recipients of therapy.

Educationally, we know that there have been various approaches to the issue of raising minimum entry level standards. These range from educational programs
that combine Bachelor and Masters degrees, resulting in a total of 5 years of education, to professional Masters programs generally of 2 years’ duration that follow on from an undergraduate degree. There are many other combinations of degrees, including online education at the Masters and doctoral level to allow access to education from remote locations. Hollis and Madill (2006) provided a thoughtful review of the many approaches to online learning in conjunction with campus-based delivery of curricula. They concluded that “evidence suggests that blending combinations of technologies with computer mediated learning enhances interaction and could address higher order learning needs in professional programs” (p. 61). You have seen from this section that professional education is currently in a state of fluidity and varies considerably around the world. Many countries still have diploma entry level programs; others, like New Zealand and Japan, have their programs in both technical colleges and in universities, and yet others are providing doctoral programs.

What about the Behavioural Changes?

Although there are significant differences in healthcare trends and in the student populations and levels at which they study, there has been little research so far into the observed changing expectations and behaviours of some of the healthcare student populations in different countries (Fisher & Crabtree, 2009). However, these changing student learning behaviours must be taken into account as they are forcing great debate and educational changes in curricula and educational practices in higher education.

Table 2.1 (adapted from Boudreau, 2009) illustrates the different characteristics of the generations as seen from a Western perspective. Social commentators such as Twenge (2006) from the U.S. have stated that “today’s young Americans are more confident, assertive, entitled – and more miserable than ever before”. Boudreau’s analysis highlights generational differences strongly. Most academics in healthcare and most experienced practising therapists belong to one of the previous generations. Their thinking has been defined as being more logical/linear and traditional, whereas the “net generation” or “millenials” or “Generation Ys” are used to multi-tasking, reading and moving several windows on the computer monitor almost simultaneously. These differences have implications for ways of learning and for developing thinking and reasoning strategies.

In their preliminary research in Australia on “Generation Y” undergraduate students, Ryan and Hills (2010) found that these students are easily distracted and, indeed, bored with knowledge, particularly theoretical knowledge, and wish to be active and “doing” practice. This behaviour trend in learning is only just surfacing and the outcomes for professional integrity cannot yet be determined. For readers of this chapter this is an emerging area that needs to be noted and incorporated into future research about professions. There are evidently significant differences between professional students in different countries, as the vignette below indicates.
### Table 2.1. Generational differences that affect education and ways of learning and working (adapted from Boudreau, 2009)

<table>
<thead>
<tr>
<th></th>
<th>Baby Boomers</th>
<th>Generation X</th>
<th>Generation Y or Millennials</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>They grew up in:</strong></td>
<td>Born 1946–1960</td>
<td>Born 1961–1978</td>
<td>Born after 1978</td>
</tr>
<tr>
<td><strong>Technology:</strong></td>
<td>Information age just beginning</td>
<td>Born in computer age, used them from infancy and comfortable with them</td>
<td>Gaming generation; technology is both a tool for work and a source of entertainment</td>
</tr>
<tr>
<td><strong>Typical characteristics:</strong></td>
<td>The “Me” generation – because of their numbers attention focused on them</td>
<td>Assertive, self-directed, clever, resourceful</td>
<td>“Just do it” Practical, techno-savvy</td>
</tr>
<tr>
<td></td>
<td>Sceptical, put more faith in themselves and less in institutions that have failed them</td>
<td>Realistic about challenges of modern life, aware of threats of violence, illegal drugs</td>
<td>Realistic about challenges of modern life, aware of threats of violence, illegal drugs</td>
</tr>
<tr>
<td><strong>Learning styles:</strong></td>
<td>Prefer interactive learning sessions more than lectures, providing a variety of means of learning (books, videos, someone to answer questions)</td>
<td>True multi-taskers</td>
<td>Grew up in computer and gaming age – don’t want to be shown how to do things, just jump in and try it</td>
</tr>
<tr>
<td></td>
<td>Like to learn with CD-ROM, interactive video, internet resources</td>
<td>Role play is seen as an opportunity to practise skills and get feedback and coaching on the spot</td>
<td>Used to dealing with simulated situations and environments</td>
</tr>
<tr>
<td></td>
<td>Can learn from experience of others and appreciate shared stories of own shortcomings and learning experiences</td>
<td>Can learn from experience of others and appreciate shared stories of own shortcomings and learning experiences</td>
<td>Contradiction of spending a lot of time working alone on computers but structured into group work in schools</td>
</tr>
<tr>
<td><strong>Views of work:</strong></td>
<td>Select profession based on intent to make the world a better place</td>
<td>Want to make money but want job that can balance job satisfaction and quality of life</td>
<td>Saw young entrepreneurs become millionaires at early age</td>
</tr>
<tr>
<td></td>
<td>Inherited the model of working vertically – enter at ground level and work way up</td>
<td>Expect to change jobs and move laterally – no commitment</td>
<td>Build parallel careers – have multi-tasked and expect to be able to do more than one job at a time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Build a portable career” – career stability rather than job stability</td>
<td></td>
</tr>
</tbody>
</table>
VIGNETTE THREE: SUSAN’S PRELIMINARY OBSERVATIONS

Ireland and Australia  Please consult Table 2.1 when reading this comparison

Susan’s experiences of working with undergraduates in two regional universities in Ireland (2001–2006) and Australia (2007 to date) were the start of her fascination with looking at this current generation of students. In Ireland, students had to receive very high points in their Higher School Leaving Certificate to gain entry into the occupational therapy program. There was a great demand for places at the regional university, and only 30 students were accepted from a pool of approximately 500 applicants. Competition encouraged students to familiarise themselves with occupational therapy websites and make visits to practice sites to have a better chance of entry. In Australia, students had also to gain high entry level points, but there was a greater choice of courses within and beyond the regional university. There was also a larger cohort of 100 first year students, and as there was a higher number of places nationally due to the greater choice of universities and programs, many students who entered knew little about the profession they found themselves studying. Many had not gained the points to enter other programs and this profession was not their first choice. Studying Table 2.1 you can see that these two groups had different starting points.

You can see that the motivation and attitudes for studying a particular profession in these two groups would be dissimilar. Furthermore, the social backgrounds of the two groups were different. Ireland, an “old” country, entered into relative prosperity in the 1990s whereas Australia, a “new” country, has had relative prosperity for several decades. The influences of family, parental support and religion were widely different as well. Irish children still came from or were surrounded by larger families. Many helped to look after younger children or had exposure to them. Although losing its domination, the Catholic Church still influenced students through school if not through the church. Australian children in “Generation Y” or otherwise known as “The Millennials” had been brought up in smaller families that involved positive psychology, semi-independence, and computerised environments of quite a sophisticated nature. Most were from two-parent working families.

Students in Ireland had to pay registration fees but no additional fees. Many did not work at all during the semester, and those who did worked to fund their social lives. In contrast, Australian students had to pay full higher education fees amounting to nearly A$10,000 per year in addition to their living, subsistence and social needs. Most students worked during the delivery of their courses. Thus they had to be strategic when deciding into what learning they put their energies. The studying behaviours of the undergraduate students of the same age in the two universities were also widely different. In Ireland, students followed a task-based learning (TBL) curriculum. Tasks were interwoven throughout the courses and were often situated in the community, but always in “real life” contexts that mirrored transferable practice attributes. Readings were done more or less regularly and there was a great involvement of the students in the program as they were so keen to study this profession. By the third year most students were reflective; they questioned established practices and were innovative in their ideas for future practice. In contrast, in Australia, students would not do any tasks unless they were directly linked to an assignment. Readings were strategically followed only if they were being tested. Teaching methods were altered to “fit in” with the students’ study and work behaviours. A great deal of time and effort was put in to make these educational accommodations. It is too early to see whether these changes still result in really “interactive therapists”.

It could be argued that “the professional as the outcome” is the criterion that matters. Comprehensive, multi-faceted research is now delving into these questions. Longitudinal research will also show whether the graduated therapist at the end is deemed comparable and accountable (Cappetta & Haskins, 2009). As we argued at the beginning of this chapter, it is only international, comparative research that will paint in the gaps in this picture.
What about the Future?

Thorne (2006) has written a thoughtful reflection on key issues for the 21st century in nursing education which has many parallels with other health professions. She stated that our “core business is the preparation of the next generation of nurses [health professionals] so that they can take their rightful place in a world order that we can only begin to comprehend. We craft knowledge frameworks, conceptualizations, and theoretical structures so that an infinite set of new ideas will arise out of the mist and take shape ... key issues for all of us to grapple with in our quest for ensuring the core values” (p. 615). This chapter has highlighted the extreme fluidity of the different trends in professional education that could have real international repercussions. It has also highlighted areas in which future scholarly debate needs to take place. We hope it has aroused your research interest in these practice and educational areas.

ACKNOWLEDGMENTS

The authors wish to acknowledge the contribution of Paola Durando, librarian at Queen’s University Health Sciences, who assisted with a literature search. In addition, Mary Lou Boudreau of the occupational therapy program at Queen’s University prepared the original Table 2.1.

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