Mapping the Future of Occupational Therapy Education in the 21st Century

Review and analysis of existing Australian competency standards for entry-level Occuaptional Therapists and their impact on Occupational Therapy curricula across Australia

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Glossary of Abbreviations

ANZCOTE	=	**Australia and New Zealand Council of OT Educators**
ANZOTFA	=	**Australia and New Zealand OT Fieldwork Academics**
COTRB	=	**Council of OT Registration Boards**
CPD	=	**continuing professional development**
GGA	=	**generic graduate attribute/s**
HEC	=	**Higher Education Council**
HERDSA	=	**Higher Education Research and Development Society of Australasia**
ICT	=	**information and communication technologies**
NOOSR	=	**National Office of Overseas Skills Recognition**
NTB	=	**National Training Board**
OT	=	**occupational therapy**
OT Australia	=	**Australian Association of Occupational Therapists (OT Australia)**
OTs	=	**occupational therapists**
WFOT	=	**World Federation of Occupational Therapists**

N.B. Please note that in-text references to the *Australian Competency Standards for Entry-Level Occupational Therapists* or the *Standards* pertain to the following document:

- OT Australia. (1994). *Australian Competency Standards for Entry-Level Occupational Therapists*. Melbourne, Australia: OT Australia (Australian Association of Occupational Therapists).

Please note that in-text references to the *Revised Minimum Standards for the Education of Occupational Therapists* pertain to the following document:

- WFOT (World Federation of Occupational Therapists). (2002). *Revised minimum standards for the education of occupational therapists:* The World Council of the World Federation of Occupational Therapists.

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Executive Summary

This discipline-specific, scoping investigation was undertaken with a view to ultimately provide the basis for future directions, practice and scholarship within occupational therapy (OT) university education. To develop university curricula that are both relevant and scholarly requires disciplinary communities to examine and devise curricular processes and principles that are anchored within the landscape of particular disciplinary knowledge and practice, as well as informed by principled approaches to effective curriculum development and renewal and inclusive of future state and national imperatives (Cousins, 2008; Hicks, 2007; Land, Cousin, Meyer, & Davies, 2006; Lattuca & Stark, 1994; Neumann, Parry, & Becher, 2002; Parker, 2003).

The development of undergraduate and graduate entry OT curricula is no exception. Similar to many of the applied health fields, OT academics must navigate national and international competency standards, localised registration requirements, cross-disciplinary research domains and diverse contexts for clinical practice in the formulation of a coherent, research-led curriculum. More specifically, there are at least three significant drivers of Australian OT curricula. The *Australian Competency Standards for Entry-Level Occupational Therapists* plays a pivotal role in the process utilised by the national professional body OT Australia for accrediting new programs and reaccrediting existing programs every five years. The *Revised Minimum Standards for the Education of Occupational Therapists,* published by WFOT in 2002, establishes universally accepted minimum standards for curricula. If a program lacks either WFOT or OT Australia accreditation status, its graduates are unable to practice in Australia, nor in many overseas countries. Finally, educators must also remain cognisant of the home university's generic graduate attributes, which must be accounted for in curriculum design.

Members of the Australia and New Zealand Council of Occupational Therapy Educators (ANZCOTE) have utilised their recent annual meetings to raise concerns regarding the currency of the *Australian Competency Standards for Entry-Level Occupational Therapists.* Specifically, educators have doubted the appropriateness of aligning curricula with standards that were developed over a decade and a half ago. Regardless of the intent to create a document that would periodically be reviewed (OT Australia, 1994) the OT Competency Standards have never been evaluated before. Additionally, the relatively recent emphasis on generic graduate attributes and their potential to articulate with specific OT competencies has neither been well understood nor adequately developed nationally previously within the field.

This timely project was driven by a strong impetus within the discipline to address these highlighted concerns. Although this evaluation was conducted by a team partnership between The University of Queensland and James Cook University, it in fact represented the perspectives of the national occupational therapy community, practitioners, educators and administrators/managers.

The following report provides a summation of the investigation into the OT Competency Standards to determine their utility, relevance, appropriateness and currency, and identify the extent of revision (if any) required to align the OT Competency Standards with contemporary requirements. The approach to this investigation comprised three key tasks. First, the conduct of a comprehensive literature review to benchmark the OT Competency Standards with contemporary standards of practice, internationally and nationally, within and across disciplines. Second, an online survey directed to key representatives sufficiently familiar with the document to provide informed comment. Third, conducting a national series of focus groups to solicit perspectives from members of the professional community, who represented a diverse range of practice areas, work settings and professional roles. The outcomes of the analyses from these three tasks are presented as a final list of recommendations. The project will then be considered in terms of: lessons of value to other initiative, reflections on the state of the OT discipline, and evaluation outcomes from stakeholder feedback.

Given the raft of changes in society, occupational therapy and Higher Education, this timely review of the *Australian Competency Standards for Entry-Level Occupational Therapists* has addressed many concerns within the professional, and particularly educational/academic, community. This scoping investigation was always envisioned to engage with and unite all stakeholders, and have a profound impact on the future of the OT discipline in Australia. The culminating set of recommendations, when endorsed by OT Australia, will not only underpin a new set of competency standards for the discipline, but also will constitute the starting points from which future curricula will be developed. Consequently, this Stage 1 scoping initiative has provided a map to chart student learning experiences for the future of occupational therapy. This project has potential provide the basis for future directions, practice and scholarship within OT university education.

Additional information on project material can be accessed from:
http://espace.library.uq.edu.au/view.php?pid=UQ:108414

1 A Description of the Initiative: Purpose, Goals and Expected

Outcomes

Our ultimate vision was a revised set of competency standards for entry-level OTs, which reflected contemporary and could guide future occupational therapy practice in Australia and would be consistent with contemporary philosophy, research, values and theories underpinning professional OT practice. The aim of this scoping initiative was to: (1) engage and consult with all national stakeholders about the current competency standards, (2) identify the links between generic graduate attributes and discipline-specific competencies that inform curriculum, and (3) propose a set of recommendations for revision of the competencies (envisioned as Stage 2). The reviewed competencies would provide national guidelines for responsive reform of OT curricula. Contemporary standards and reformed curricula would enrich learning experiences for OT undergraduate students and make explicit their alignment with professional practice.

Accordingly, the intended outcome of this scoping investigation was to map the future for developing new competency standards and the ways in which those standards could shape curricula and assessment, and ultimately embed graduate attributes and discipline specific competencies to benefit student learning. Our project was proposed as a two stage activity; Stage 1 focused on the scoping activity while Stage 2 will evolve from Stage 1 and requires further funds to: (1) develop a revised set of competency standards for entry-level OTs in Australia, and (2) investigate good practice in curriculum and assessment design with respect to integration of graduate competencies within the curriculum.

Specifically, the aims of this scoping investigation (Stage 1) were to:

1. Investigate how the *Australian Competency Standards for Entry-Level Occupational Therapists* were **currently being used** by OT Australia (and its accreditation panel), schools of occupational therapy within their undergraduate and graduate entry programs, and by others within the profession.
2. Identify how schools of OT used both the *Australian Competency Standards for Entry Level Occupational Therapists* and **university level graduate attributes** to inform curriculum at the course and program levels.
3. Investigate the use of graduate competency standards within the profession and among other allied health professions nationally and internationally.
4. Conduct a **comprehensive review of the relevance, utility, and appropriateness** of the *Australian Competency Standards for Entry-Level Occupational Therapists* for documenting beginning competencies for **current and future** occupational therapy practice.
5. Identify where changes might be required to the *Australian Competency Standards for Entry-Level Occupational Therapists* in terms of 'units of competency, elements, and performance criteria'.
6. Ensure that the *Australian Competency Standards for Entry-Level Occupational Therapists* were consistent with the *Revised Minimum Standards for Occupational Therapy Education*

The five deliverables (outcomes) emanating from this scoping project (Stage 1) were:

1. **Summary of current use** of the *Australian Competency Standards for Entry-Level Occupational Therapists* and links between the document and institution specific graduate attributes, based on a survey of ANZCOTE members (i.e., Heads of OT programs), OT Australia (National) representatives and other key members of the profession (end of 4th month of project) (Phase 1-D1).
2. **Literature review** summarising international perspectives on the use of competency based standards in occupational therapy and other allied health professions (end of 4th month of project) (Phase 1 -D2).
3. **Mid term report** to Australian Learning and Teaching Council Ltd (end of Phase 1– D3).
4. **Report** summarising the relevance, appropriateness, utility and satisfaction with the *Australian Competency Standards for Entry-Level Occupational Therapists* from multiple stakeholders' perspectives (12th month/end of project) (Phase 2 – D4). These findings have been further disseminated via presentations at the HERDSA 2008 Conference and the National OT Australia 2008 Conference.
5. **List of recommendations** for revision of the competency standards in terms of units of 'competency, elements, and performance criteria' in the *Australian Competency Standards for Entry-Level Occupational Therapists* (12th month/end of project) (Phase 2 – D5).

2 Theoretical Framework and Underpinnings

Literature Review: Introduction

The nature of professional practice is dynamic and subject to frequent change. OTs are expected to respond to expanding knowledge and shifting socio-cultural contexts, and continue to provide high quality services commensurate with community demands. As practice adapts to accommodate public needs and values, perceptions of what constitutes competent performance are also modified and redefined. "Competence is not static but unfolds and evolves" (Alsop, 2003, p.263). A commitment to regular review and re-evaluation of its priorities will enable the occupational therapy profession to capitalise on opportunities for further development and encourage the emergence of new practice areas and specialties.

Within the Australian health care environment, occupational therapy is renowned for its versatility. "Diversity has become a hallmark of occupational therapy, in terms of both the client populations that occupational therapists work with and the practice settings in which they are located" (Whiteford & Wright St-Clair, 2002, p.129). The occupational therapy profession has a chameleon-like nature: it can respond to priorities and needs of clients, practice settings and fellow health professionals by adapting its skills and assuming different roles. While intrinsic to and celebrated by the profession, this adaptability also provides a challenge for those seeking a comprehensive and consistent definition of occupational therapy and the services it provides.

Since the introduction of the *Australian Competency Standards for Entry-Level Occupational Therapists* in 1994, Australia and its health care needs have changed considerably. Occupational therapy practice has evolved accordingly and it was unclear whether the competency standards are still relevant. Despite the intention to create "a working document which will be periodically reviewed and revised" (OT Australia, 1994, p.2), the competency standards have not been modified since their initial inception. It is imperative that competency standards retain their currency to accurately reflect a profession's character and function. "The dynamic nature of practice, which is always changing and developing, means that competence [and standards regulating competence] also must be changing and growing" (Youngstrom, 1998, p.717). Competency standard documents embody a profession's critical philosophies, purpose and scope. They are a public declaration of the attitudes and values which underpin service, and may also identify the aspects of task performance observable in the workplace. Every competency integrates elements of intellectual and interpersonal competence, against the backdrop of public, academic and professional obligations (Walsh, 2002). Competency standards documents mandate the standards of practice which practitioners are obligated to provide.

The *Australian Competency Standards for Entry-Level Occupational Therapists* not only defines and establishes acceptable levels of competence within the profession, but also influences the design of occupational therapy education programs. The national professional body, the Australian Association of Occupational Therapists (OT Australia), utilises this document during its accreditation of Australian occupational therapy programs. This highlights the importance of competency standards reflecting not just contemporary practice but also underpinning future practice, to ensure that graduate occupational therapists possess the requisite skills and knowledge upon entry to the profession. Considering the magnitude of change in the 14 years since the competency standards were first published, the need for review had become increasingly critical to ensure that educational curricula are consistent with contemporary philosophy, research, values and theories underpinning practice. "We need a position on professional concepts and processes which reflect our national heritage, national achievements and the challenges which face our society in the century ahead" (Cusick, 2001, p.115).

The *Australian Competency Standards for Entry-Level Occupational Therapists* is not the only document consulted by educators when designing curricula. They must also reference the *Revised Minimum Standards for the Education of Occupational Therapists*, which identifies the essential aspects of content, process and accountability mechanisms which must be incorporated into an occupational therapy program to satisfy international requirements. Furthermore, the occupational therapy program must address the generic graduate attributes specified by its home university. Occupational therapy educators must integrate the directives from these three documents in the design of curriculum. The disparity between

the multiple sets of university generic graduate attributes constitutes further contextual complexities which may need to be considered in revised competency standards to guide the curriculum design for future generations of OTs.

The intent of this literature review was to identify key issues for review of the *Australian Competency Standards for Entry-Level Occupational Therapists.* These issues were later discussed with representative occupational therapists on a national scale during a series of focus groups in 2008. The following sections provide an overview of competency standards and then compare and contrast the structure and content of the *Australian Competency Standards for Entry-Level Occupational Therapists* with other official competency standards documents. These include the two documents previously mentioned that directly impact upon the design of occupational therapy curricula; and also competency standards of health services and other health disciplines in Australia, and occupational therapy competencies from other countries. Derived from this analysis is a set of proposed approaches and key concepts which informed the subsequent consultation and recommendations phases of this project.

Roles and Applications of Competency Standards

Competency standards are regarded as authoritative documents (Standards Australia, 2005) which describe not only the required skills but also the knowledge and attitudes which are considered critical to practice at an acceptable level (Greiner & Knebel, 2003; McAllister, 2006). Competency standards typically describe the conduct expected of a specific discipline (Chambers, 1994) but have also been developed to address multidisciplinary practice and specialty areas of practice (Braithwaite & Travaglia, 2005). The main purpose of competency standards is to provide individual practitioners with a means to evaluate their performance. Other applications include the maintaining and enhancing of professional standards, guiding the design of education and training programs, screening internationally trained workers, and creating job descriptions (Abreu, Peloquin, & Ottenbacher, 1998; Hager & Gonczi, 1991).

Although responsibility for authorship of competency standards typically rests with the professional or accrediting organization (Braithwaite & Travaglia, 2005) and regulatory bodies (Gossman, 1998), there is an expectation that the standards will embody the shared perceptions of competent performance held by diverse members of the profession (Standards Australia, 2005). Occupational therapy is notoriously broad and multi-faceted; for such professions it is recommended that stakeholder perspectives are solicited widely to "allow sufficient representation to provide both content expertise and constituent representation" (Chambers, 1994, p.362) in the development of competency standards. It is expected that competency documents will be regularly reviewed, revised or even withdrawn (Standards Australia, 2005). Considering the dynamic environment of health care services, this is particularly relevant to the health professions (Australian Health Ministers, 2004). While one article was identified that recommended that competency documents should be reviewed at least every 7 to 10 years to prioritise key contemporary issues (Dunn & Cada, 1998), there exists no stipulation for review procedures nationally or internationally. It should be noted that a review does not necessarily require a drastic revision of practice (Cusick, 2001); only minor adjustments may be required to accommodate contemporary service requirements.

There are a number of models for formatting competency standards but within Australia, the National Training Board (NTB) has recommended that professions adopt the Australian Qualifications Framework. Although not mandatory, this framework is expected to be consistently applied in industry competency standards, to promote transparency of service and provide national consistency across industries (ALIA, 2007). Within the Australian Qualifications Framework, competencies are presented as standards – "a statement in outcome terms of what is expected of an individual performing a particular occupational role" (ALIA, 2007, p.2). Each standard is typically composed of a *Unit* (broad outline of area of professional activity), *Elements* (specific activities within that unit), *Performance Criteria* (descriptors to qualify the level of acceptable performance), and optional *Cues* (examples of practical considerations and contextual features which impact on competent performance) (ALIA, 2007).

When considering competency standards documents, language choice warrants attention. In the interests of thoroughness, transparency and perspicuity, Chambers (1994) recommended that statements of competency should include as a minimum: a verb (the most significant

performance of the competency); direct object (e.g. the client, the impairment, the task/role, etc.), and qualifying conditions (to provide further description/specificity). Chambers also cautioned against language that is too prescriptive, at risk of segregation and promoting 'partial competency' rather than an integrated, synthesized performance. Word selection is also important in view of the earlier discussion on the complex nature of competence. Depending on a profession's scope and susceptibility to contextual variation, word choice must be calculated, to accommodate versatility in practice whilst avoiding misinterpretation (McAllister, 2006). Frequently used descriptors summarising competencies are 'knowledge, skills, and values or attitudes' (e.g., Bossers, Miller, Polatajko, & Hartley, 2002; Dall'alba & Sandberg, 1996; WHO, 2005).

To promote a versatile, productive, and internationally competitive workforce, the Australian Government recommended that national industries adopt competency standards and established the NTB in 1990 to supervise this venture. Subsequently, the national occupational therapy professional body, OT Australia, supported by the National Office of Overseas Skills Recognition (NOOSR), endeavoured to produce a set of competency standards applicable to locally and internationally trained OTs practising in Australia. Extensive consultation with professional stakeholders occurred on a national scale to develop standards which described "the skills, knowledge and attributes the profession believes are required for adequate practice in entry-level occupational therapists" (OT Australia, 1994, p.2). The *Australian Competency Standards for Entry-Level Occupational Therapists* defines competency as a concept both abstract and tangible, "a complex interaction and integration of knowledge, judgment, higher-order reasoning, personal qualities, skill, values and beliefs" (p.2) common to all occupational therapists despite the heterogeneity of practice environments and clients. Entry-level was defined as the first 2 years of practice. The document was intended to embody the standards of the profession at the time but also into the near future, and recognised that in order to retain its currency it must exist as "a working document which will be periodically reviewed and revised" (p.2). Applications of the standards included: screening internationally trained OTs, designing work re-entry programs, guiding development of curriculum in undergraduate programs; developing higher level competencies, conducting workplace performance appraisal, identifying registration requirements and developing job descriptions (OT Australia, 1994).

Although professional competency standards have a significant influence in curriculum design, each Australian university is largely responsible for developing its own curriculum, which makes establishing consistent national criteria for educational performance difficult (Bossers et al., 2002). National professional associations commonly use competency documents when assessing and accrediting university programs. Indeed, OT Australia uses the *Australian Competency Standards for Entry-Level Occupational Therapists* to accredit the undergraduate and graduate entry courses at each of the 13 national undergraduate OT programs every five years, to promote national parity and high professional standards. Each university is accredited within its own five year cycle with multiple programs at one university being accredited simultaneously. Each program is required to use a self-study accreditation manual which contains the OT competency standards to justify the content, learning objectives and delivery methods of their curriculum. (This accreditation process and its procedures are currently under review by OT Australia). "Competency statements can form the bridge between education and practice" (Walsh, 2002, p.4). While competency standards should not necessarily dictate the content and methods of curriculum design and assessment, they certainly provide a valuable guide to educators in determining what competencies are expected of their graduates (Lum, 2004).

University Generic Graduate Attributes and their Compatibility with the OT Competency Standards

Anticipating that the future workforce would need to contend with the demands of a dynamic work environment highly susceptible to change and adaptation, the Industrial Research and Development Advisory Committee of the European Communities on Skills Shortages in Europe proposed in 1990 that higher education institutions should instill skills and abilities in its graduates beyond those specific to their disciplinary field (Harris, Adamson, & Hunt, 1998). This recommendation was heeded in Australia, as demonstrated by Higher Education Council's (HEC) publication of *Achieving Quality* (1992). Universities would be required to produce graduates possessing a prescribed set of generic attributes (Barrie, 2004; 2006) to answer the public demand for effectiveness and efficiency.

By specifying generic graduate attributes, in effect a university issues an assurance that its graduates will provide a valuable contribution to the workforce (Barrie, 2004; Beckett, 2004). In Australia generic graduate attributes tend to emphasise the principles of social responsibility and justice (Barrie, 2004). These attributes are considered beneficial across a range of contexts, and range from moral and ethical virtues to simple technical skills (Barrie, 2006; McAllister, 2006). The introduction of graduate attributes was intended to inspire curriculum reform, and to enhance the competencies of practicing professionals (Clanchy & Ballard, 1995). Responsibility for incorporating graduate attributes into discipline-specific curricula fell to the university educators (Barrie, 2006). Although all Australian universities have complied and developed their own sets of generic graduate attributes, inconsistencies in format (Barrie, 2004), sheer variety and the "hodge-podge of general desiderata with low-level technical competencies… lumped indiscriminately together with higher order intellectual skills" (Clanchy & Ballard, 1995, p.157) would suggest that the concept of generic graduate attributes is not really well understood (Barrie, 2006; Clanchy & Ballard, 1995).

Therefore occupational therapy educators at Australian universities must now incorporate generic graduate attributes as well as discipline-specific competencies in their curriculum. The variation in generic graduate attributes between universities poses a potential threat to the entry-level standards of nationally trained occupational therapists. It must be determined whether the heterogeneous design of curricula will compromise the consistency, quality and expectations of skills in the future generations of our occupational therapists.

The graduate attributes from each of the 13 Australian universities with an occupational therapy school were downloaded from each university website and compared. There was considerable variation in the number of attributes (ranging from 3 – 12). Some universities have defined their graduate attributes in broad, over-arching terms that encompass more specific components (e.g. University of Sydney and University of Newcastle), whereas others have opted to identify a larger list of attributes which are more circumscribed (e.g. James Cook University and Deakin University). Despite these differences, 17 common themes were identified. The 13 universities have been compared in terms of their attention to these themes. Four themes were common to all 13 universities and are presented in Table 1. Of the 17 themes, 12 were present in more than 50% of the universities. Attributes relating to moral attitudes and ethical virtues were most prominent, while attributes relating to technical skills, such as numeracy and literacy, were least common.

Based on this analysis, the graduate attributes of each of the 13 universities do not appear to be contradictory to any of the competencies for the profession of occupational therapy. Yet as the *Australian Competency Standards for Entry-Level Occupational Therapists* is also used to screen internationally trained OTs, it may be useful to explicitly state these attributes in revised competency standards.

Table 1: Consistent Themes in Generic Graduate Attributes from the 13 Australian Universities with an Occupational Therapy School

Four Consistent Themes
Effective communication skills
Displays attitude of enquiry and research
Demonstrates critical thought and analysis
Values-driven practice

Competencies for Cognate Allied Health Professions

Please note that the following analyses of competency standards are based on explicit statements contained within the documents, or reasonable interpretation of what is written. While this review was intended to be thorough, comments where concepts/competencies are described as either absent or insufficiently emphasised should be interpreted with caution. While the institution/discipline/country may not have given equal attention or emphasis to the concept/competency in its standards, it should not be presumed that the institution/discipline/country does not endorse this concept/competency.

The cognate allied health professions of audiology, physiotherapy and speech pathology were selected for comparison with occupational therapy. There are currently no official competency-based standards for audiologists in Australia and therefore audiology has been excluded from further analysis. Although the *Australian Standards for Physiotherapy* © (Australian Physiotherapy Council, 2007) are not officially called 'competencies', this document is similar in intent to the competency-based standards

of occupational therapy and speech pathology and it has been considered appropriate for inclusion in this analysis. Headings from the competency standards for occupational therapy, physiotherapy and speech pathology (Speech Pathology Australia, 2001) have been compared in Table 2.

A symbol-coding scheme has been used to identify the standard headings from each document that contain similar concept/s. Standards were noted to differ in their level of specificity: some were more over-arching than others, and in fact embodied concepts contained in several standards from the other documents. Accordingly, if a cell contains a symbol but no words, this indicates that the standard listed directly above it is over-arching and encompasses the concept/s identified by the standards presented in the cells to the left and or right. If the standard heading has been written in italics, this indicates that while addressing the concept/s identified in the standards from the other documents, the standard written in italics does not give equivalent weight or attention to the concept/s.

While not stated explicitly, the standards of speech pathology and physiotherapy appear to follow the Australian Qualifications Framework, as recommended by the NTB. As noted in the attached literature review (see Appendix 2), adopting comparable formats promotes national consistency and facilitates communication between the different disciplines. It is not reasonable to expect different disciplines to share identical competencies for practical tasks. So when comparing the occupational therapy standards to standards from the cognate allied health disciplines, the focus must be on those competencies considered important for a health professional practicing in Australia.

Table 2: Comparing the Units from Competency Standards of Cognate Allied Health Disciplines

Speech Pathology (2001)	Physiotherapy (2007)	Occupational Therapy (1994)
■ Assessment	■ Assess the client	■ Assessment & Interpretation of Occupations, Roles, Performance & Functional Level of Individuals and Groups
❍ Analysis & Interpretation	❍ Interpret and analyse the assessment findings	❍
▲ Planning of Speech Pathology Intervention	▲ Develop a physiotherapy intervention plan	▲
✱ Speech Pathology Intervention	✱ Implement safe and effective physiotherapy intervention(s)	✱ Implementation of Individual and Group Interventions
●	● *Communicate effectively*	● Documentation & Dissemination of Professional Information
✖ *Planning, Maintaining, and Delivering Speech Pathology Services*	✖ Evaluate the effectiveness and efficiency of physiotherapy intervention/s	✖ Evaluation of Occupational Therapy Programmes
❖ Planning, Maintaining, and Delivering Speech Pathology Services	❖ *Access, interpret and apply information to continuously improve practice*	❖ Management of Occupational Therapy Practice
⌘ Professional Development	⌘ Demonstrate professional behaviour appropriate to physiotherapy	⌘ Professional Attitudes & Behaviour
◆	◆ Access, interpret and apply information to continuously improve practice	◆
	♣ Communicate effectively	♣
⊙ Professional, Group and Community Education		⊙ Professional Education
❂ Range Indicator Statement	❂ Operate effectively across a range of settings	

Both speech pathology and physiotherapy have designated a separate section, distinct from the listing of competency standards, which provides a useful explanation of the scope and range of services that the public can expect. There is no equivalent provision or attention to specialist areas and settings in the occupational therapy competency standards document. The physiotherapy standards also identify key contemporary issues of practice, such as the client-centred approach and cultural competence. All three disciplines acknowledge that standards of competency require regular review to maintain their currency. Although not specifying a regular review cycle, both speech pathology and physiotherapy have revised their standards since their initial inception (in what can be inferred to be a 7 year cycle). The competencies for occupational therapy have not officially been reviewed since their introduction 13 years ago.

Of the three professions, occupational therapy is unique in defining entry-level competence as the first two years of practice. This implies that a higher level of performance is expected from OTs after they have completed their first two years of practice.

Global Standards for Occupational Therapy

The World Federation of Occupational Therapists (WFOT) has recently developed a global competency standards framework for entry-level occupational therapists (2008). The *Revised Minimum Standards for the Education of Occupational Therapists* is the current international reference for the design of occupational therapy curricula, which encourages international consistency in standards of occupational therapy services (Rogers, 2005). While this document pertains to competencies for educational programs rather than OTs, it is certainly influential in the development of occupational therapy in individual countries and therefore warrants consideration in regard to its influence on the *Australian Competency Standards for Entry-Level Occupational Therapists.*

The *Revised Minimum Standards for the Education of Occupational Therapists* has been revised on multiple occasions since its introduction in 1952, in response to changes in provision of health care services, and occupational therapy terminology and techniques. WFOT commented that with each revision, it became necessary to adopt a less prescriptive stance "to allow for more flexibility to allow for differences in local health and welfare needs" (p.3). There is emphasis on the need to review both curricula and national standards of practice "as the local health needs, occupations, services, legislation and student knowledge, skills and attitudes change over time" (p.8), which necessitates continuous open dialogue between practising OTs and educators.

WFOT (2002) recommended that while curricula should aim to address national contexts and priorities to prepare OTs for local practice, they should also enshrine the core principles of occupational therapy to promote international consistency. Key terms and concepts specified by WFOT include life-long learning, the primacy of occupation as the focus of intervention, reflective practice, collaborative practice, evidence-based practice, and management skills. Professional competence is defined as the "knowledge about what your knowledge, skills and attitudes are and how current and acceptable they are" (p.19), and results from both entry-level preparation and clinical experiences.

WFOT identified five core competencies expected in graduates of occupational therapy programs, which have been compared against the competencies of the *Australian Competency Standards for Entry-Level Occupational Therapists* in Table 3.

Table 3: Comparison of Australian Competencies for Occupational Therapists against the WFOT Essential Competencies for Graduates of Occupational Therapy Programs

Competency Standards for Australian OTs (1994)	WFOT Essential Knowledge, Skills & Attitudes for Competent Practice (2002)
■ Professional Attitudes and Behaviour	■ Professional reasoning and behaviour – meeting local & international expectations of qualified health care workers – research/information search process – ethical practice – professional competence – reflective practice – managing self, others and services
❂ Management of Occupational Therapy Practic	❂ **The person-occupational-environment relationship and its relationship to health**
	❂ **Therapeutic and professional relationships** – establishing effective working relationships with recipients of occupational therapy and effective teamwork
	❂ **The context of professional practice** – aspects of the physical, attitudinal and social environment affecting people's health and participation, and affecting OT practice. – local factors and international factors
♣ Professional Education	
❖ Assessment & Interpretation of Occupations, Roles, Performance & Functional Level of Individuals and Groups	❖ **An occupational therapy process** – the process followed by OTs when working with recipient of OT. Nature of process will vary with context and purpose of intervention. It is what the OT does, and the sequence in which things are done
❖ Implementation of Individual and Group Interventions	
❖ Evaluation of Occupational-Therapy Programmes	Symbol-coding used to identify standards containing similar concepts/themes
❖ Documentation and Dissemination of Professional Information	

Not surprisingly, the WFOT competencies are less specific and fewer in number than the Australian competencies. It is however interesting that a congruent competence for 'Professional Education' has not been explicitly identified by WFOT as a necessary part of international curricula (although it could be argued that this competence would be covered by the standard 'Professional Reasoning and Behaviour'). In the Australian context, speech pathology has produced a similar standard ('Professional, Group and Community Education') but physiotherapy has not.

Table 4: Identifying Similarities between the Recurrent Themes of Australian University Generic Graduate Attributes and Conversant Competency Standards Developed by Australian OTs and WFOT

Australian Occupational Therapy Competency Standard: Professional Attitudes and Behaviour (1994)	WFOT Core Competency: Professional Reasoning and Behaviour (2002)	Consistent Themes from Australian University Generic Graduate Attributes
⌘ 1.1 Practices in an ethical and professional matter.	⌘ – ethical practice	⌘ – Values-driven practice
✘ 1.2 Understand the broad impact of political, legal and industrial issues on the profession, employing body and its client groups.	✘ – meeting local & international expectations of qualified health care workers	▲ – Effective communication skills
⊙ 1.3 Assumes responsibility for own professional practice.	▲ – managing self, others and services	✎ – Demonstrates critical thought & analysis
⌘ 1.4 Respects the individuality and worth of each client within his/her environment.	✎ – reflective practice	❄ – Displays attitude of enquiry & research
▲ 1.5 Establishes and maintains collaborative working relations with other disciplines.	⊙ – professional competence	
▲ 1.6 Communicates effectively with clients and / or significant others.	❄ – research/information search process	
1.7 Demonstrates the ability to effectively handle emergency and/or threatening situations.		
⊙ 1.8 Expands own level of professional competence.		
❄ 1.9 Contributes to the validation of occupational therapy practice through research as appropriate.		
⊙ 1.10 Contributes to occupational therapy practice through support of OT Australia.		
▲ 1.11 Demonstrates preparedness to undertake advocacy roles on behalf of clients.		

Similarly Themed Concepts

⌘ = ethics/values
✘ = organizational/ legislative issues
⊙ = competent performance
▲ = interpersonal relations
❄ = research
✎ = evaluation

In Table 4 the four recurrent themes in Australian university generic graduate attributes are compared with the statements contained in the Australian occupational therapy standard 'Professional Attitudes and Behaviour' and the WFOT competency 'Professional Reasoning and Behaviour'. A statement pertaining to critical thought or reflective practice is notably absent from the Australian OT standards.

Prominent issues otherwise common to all three documents are ethical values, expectations of conduct, cognitive processes, and interpersonal relations.

International Competencies for Occupational Therapists

To ensure Australian occupational therapy competency standards are commensurate with international standards, it is important to examine the content and format of competencies developed by other national bodies. Standards have been collected from nine countries/organizations: Brazil, Singapore, Hong Kong, Sweden, Council of the Occupational Therapists in the European Communities (COTEC), USA, United Kingdom (UK), New Zealand (NZ) and Canada.
The frameworks chosen to format the standards are inconsistent, and despite the multitude of applicable frameworks available the decision to apply one framework instead of others was rarely justified by the authors/writing bodies. Brazil (2002) and Canada (2007) have adopted unique frameworks for their competencies, but seven documents can be categorized into two types of frameworks. Table 5 provides a comparison between competency standards from Hong Kong (1996), Singapore (1996) and Sweden (2003). We have assigned the term 'Technical-Prescriptive framework' to describe these three documents. This 'Technical-Prescriptive framework' distinguishes these sets of competencies from four other competency documents, which we have classified as following an 'Enabling Framework'. The competencies from USA (2005), UK (2007), NZ (2004) and Australia (1994) follow the 'Enabling framework' and have been compared in Table 6.

A symbol-coding scheme has been used to identify the standard headings from each document that contain similar concept/s. Grey shading indicates that there is no standard within that document which similarly addresses the concept/s included by the other writing bodies. Standards were noted to differ in their level of specificity: some were more over-arching than others, and in fact embodied concepts contained in several standards from the other documents. Accordingly, if a cell contains a symbol but no words, this indicates that the standard listed directly above it is over-arching and encompasses the concept/s identified by the standards from other documents presented in the cells to the left and or right. If the standard heading has been written in italics, this indicates that while addressing the concept/s identified in the standards from the other documents, the standard written in italics does not give equivalent weight or attention to the concept/s.

Table 5: Competency Standards Following a Technical-Prescriptive Framework

Singapore (1996)	Hong Kong (1996)	Sweden (2003)
✧ (1) Assessment	✧ (3) Evaluation	✧ – OT Assessment, objectives, documentation, evaluation & follow-up
❂ (2) Treatment Planning	❂ (4) Program Planning	❂
	❖ (1) Screening	❖
	✘ (2) Referral	✘
		⊙ Areas & functions of the profession
⌘ (6) Legal / Ethical Components	⌘ (10) Legal/Ethical Components	⌘
♣ (3) Implementation of Treatment Plan	♣ (5) Program Implementation	♣ – Medico-technical products – assistive devices
☽ (4) Discharge Planning	☽ (6) Discontinuation of Services	
✖ (5) Quality Assurance	✖ (7) Quality Assurance	✖ – Resource Husbandry
		✖ – *Planning & Management tasks*
		※ – Planning & Management tasks
	✐ (9) Safety & Confidentiality	✐
		◗ – Emergency Preparedness
	❄ (8) Indirect Services	❄ – Preventive, health-promoting & compensatory measures
	✷	✷ – Health promoting measures
	◇	◇ – Information, teaching and supervision
		– Equipment & environment
		⊗ – Research & Development

The COTEC competencies (2006) contain elements of both frameworks. The key point of distinction between these two frameworks is the degree of flexibility and variation in practice each can accommodate. The Technical-Prescriptive framework, as the rubric suggests, encourages a rather instructional and almost sequential description of what might be observed during an OT's work performance. This framework suggests that there are a finite number of approaches to practice. In contrast, the Enabling framework establishes a guide to practice, providing instruction for how to approach task performance, instead of how to perform specific tasks and roles. The less prescriptive stance of the Enabling framework is congruent with the earlier proposal that competent practice requires a synthesis of multiple performance components.

Table 6: Competency Standards Following an Enabling Framework

USA (2005)	United Kingdom (2007)	Australia (1994)	New Zealand (2004)
◆ (2) Screening, Evaluation, and Re-evaluation	◆ (3) Assessment and Goal Setting	◆ (2) Assessment & Interpretation of Occupations, Roles, Performance & Functional Level of Individuals & Groups	◆ (1) Implementation of Occupational Therapy
◇	◇ (1) Referral	◇	◇
❂	❂ (2) Consent		❂
▣		▣ (4) Evaluation of Occupational Therapy Programmes	▣
⌘ (3) Intervention	⌘ (4) Intervention and Evaluation	⌘ (3) Implementation of Individual and Group Interventions	⌘
✘ (4) Outcomes	✘ (5) Discharge, Closure, or Transfer of Care	✘	✘
◗	◗ (6) Record Keeping	◗ (5) Documentation and Dissemination of Professional Information	◗
♠ (1) Professional Standing and Responsibility	♠ (8) Professional Development / Lifelong Learning	♠ (1) Professional Attitudes and Behaviour	♠ (3) Culturally Safe Practice
⬣	⬣ (8) Professional Development / Lifelong Learning	⬣	⬣ (7) Continuing Professional Development
	✷ (9) Practice Placements	✷ (6) Professional Education	✷
✖	✖	✖ (7) Management of Occupational Therapy Practice	✖ (6) Management of Environment & Resources
✎	✎ (7) Service Quality and Governance	✎	✎ (5) Management of Self & People
+	+ (11) Research Ethics	+	+ (2) Safe, Ethical, Legal Practice
☆	☆ (10) Safe Working Practice	☆	☆
⇨ (2) Screening, Evaluation, and Re-evaluation	⇨ (2) Consent	⇨	⇨ (4) Communication

It appears that the development of occupational therapy services within a country is mirrored by choice of framework: when the scope of practice is narrower, standards can afford to be more prescriptive but when the scope expands, a more facilitating approach is required. The specificity contained within competency standards adopting the Technical-Prescriptive framework implies that it is possible to exhaustively list all of the requisite tasks of an OT. In contrast the Enabling framework, via labeling of standards and language choice, alludes to the complex relationship between client characteristics, practitioner and profession development, and practice settings which determines the level of performance considered competent.

We have identified several factors that appear to have contributed to the variance in how individual countries have approached the compilation of their competency standards:

Culture

Different cultural values appear to have strongly influenced the development of competency standards, which highlights the importance of context in defining competence. The Brazilian competencies (2002) emphasise social responsibilities and individual rights, e.g. "become able to act as a facilitator and an agent of social transformation of communities and social groups through an attitude of inclusiveness" (p.3). Competencies formatted according to the Technical-Prescriptive framework make reference to other ethical documents, but otherwise focus more on procedural elements of work performance, which is illustrative of cultural priorities and perspectives. For example, in Singapore and Hong Kong most occupational therapy services require a medical referral and intervention is based on the medical model of practice. In countries such as the United Kingdom, there is greater attention to managerial and efficiency requirements of practice, e.g. "provide a service of the highest quality and the best value for money" (College of Occupational Therapists, 2007, p.3).

National Priorities

Swedish health and social services are highly regarded for their responsiveness to individual needs. Accordingly, five of the 10 Swedish competency standards are devoted to products and services of intervention. COTEC standards are applicable to 25 countries so cannot afford to be too prescriptive at risk of cultural variations and discrepancies. The Canadian framework was chosen to provide national consistency, since it is common to other health professions in Canada, such as doctors. Australia similarly justifies its choice of framework on the basis of conforming to national expectations. This influence of national context emphasises that OTs are expected to be competent to meet the priorities of their local population.

Scope of Occupational Therapy Services

The type of framework (i.e. either Technical-Prescriptive or Enabling) appears to reflect the scope of occupational therapy services in that country. Where practice is limited to specific settings (primarily the traditional hospital or medical institutions), such as in Hong Kong and Singapore, it is possible to adopt a more prescriptive approach and state explicitly the tasks and duties the OT is expected to perform. The Enabling framework has been adopted by countries where the scope of practice is much broader, with more diverse and consequently more complex skills required by OTs, including skills that may be unique to a specific practice area. In these countries, the competency standards reflect the generic foundation skills and abilities which underpin competent practice. Both the documents developed by Canada and COTEC provide a summary of the potential areas and functions of occupational therapy in the national/international context, to which the competencies are expected to apply. This feature is useful in highlighting the nature of occupational therapy practice within the national context.

Authorship

Brazil produced the only document by scholars and educators and specifically intended to guide curriculum development. The 34 statements of competence read similarly to course outcome statements. Regulatory boards were responsible for the development of the COTEC and NZ standards, which is reflected by the choice of phrases such as "the occupational therapist shall comply with guidelines" (COTEC, 2006, p.4) and "conform to accepted standards" (Occupational Therapy Board of New Zealand, 2004), and the frequent reference to legislative and institutional policies and regulations. When the professional association has been responsible for developing the standards, there seems to be a greater focus on the conceptual, ethical, and meta-cognitive aspects of occupational therapy (e.g., the Australian and Canadian documents).

Language Choice

The competencies are generally presented with a main heading followed by explanatory details in sentence or list format, and usually begin with a verb. The language within the competencies following the Technical-Prescriptive frameworks is rather instructional, with regular use of words such as "shall", "should", and "must". Although at first glance the headings of the USA competencies would suggest a more methodological approach, regular use of language such as "facilitates", "collaboration" and "appropriate" application of the occupational therapy process, indicates that an Enabling framework has been used. The UK competency document recommends that practitioners exercise discretion in determining what is competent for their context, e.g. "assessment should be based on identifiable and justifiable reasons" (College of Occupational Therapists, 2007, p.2), which justifies its inclusion in the group of Enabling frameworks.

Intended Use

All competency standard documents were developed to provide practitioners with a guide to the expected levels of performance. Other applications identified include guiding curriculum development, informing service users, colleagues and employers of occupational therapy functions and responsibilities, and monitoring and enhancing standards of occupational therapy services and the profession. The UK document includes audit templates to assist practitioners to critique themselves or their service against the competency standards.

Other issues highlighted in the comparison of Australian occupational therapy competencies to other international OT competencies include:

Entry-Level Definitions

Australia is the only country to define entry-level occupational therapy practice as the first two years of practice. No other country has made this distinction.

Competence Definitions

Some countries imply that competence encompasses the minimum level for acceptable or adequate work performance (e.g. Hong Kong, Singapore, Sweden, COTEC, Australia, USA), whereas others (e.g. UK) indiscriminately include aspirational and basic expectations for performance. Australia and Canada are the only two countries to provide a definition of competence. Canada in fact distinguishes between proficient and competent performance. Competent performance is defined as "the requisite knowledge, skills and abilities expected throughout an occupational therapist's career" (College of Occupational Therapists of British Columbia, 2007), whereas a proficient practitioner is defined as one with similar competencies who can practice "with enhanced ease and sophistication in such areas as efficiency and quality, as well as a greater capacity to deal effectively with a wider range of complexity" (College of Occupational Therapists of British Columbia, 2007). These variations reflect that there is currently no international consensus amongst OTs as to how competence is conceptualised.

Need for Review

Six of the 10 competency standard documents analysed recognized the need for review to retain currency. Of those which have been reviewed, the review cycles appear to be at four, five, or seven year intervals.

Concluding Thoughts

Competency standards must mirror the performance expected of practising OTs. Australian occupational therapy curricula have been reviewed and adapted in light of contemporary practice trends, and to satisfy requirements of the *Revised Minimum Standards for the Education of Occupational Therapists* and the generic graduate attributes specified by universities. However, the competencies enshrined by the *Australian Competency Standards for Entry-Level Occupational Therapists* have not been adjusted to accommodate these changes. Of the three official documents impacting the design of Australian occupational therapy curricula, the national competency standards have the most significant influence. It is therefore important that the document stating and defining these competencies embodies not just the standards for practitioners of the past and present day, but also for future generations of OTs.

Summary of Issues/Concerns Identified by the Literature Review for Revising the *Australian Competency Standards for Entry-Level Occupational Therapists*

- **Structure and Framework**

– The current competencies are based on the Australian Qualifications Framework, which is endorsed by the NTB and adopted by other national industries and professions. This is considered beneficial in promoting national consistency and transparency of services.

– The current Enabling framework of the Australian occupational therapy competencies accommodates the versatility and diversity which is characteristic of contemporary practice. Individual practitioners require guidance regarding how to approach practice, but must be allowed to exercise discretion in choosing specific techniques and interventions as appropriate to their context. Thus a certain degree of flexibility within competency standards is essential to endorse the concept of critically reflective practice. The document must permit and encourage further development and expansion of occupational therapy services.

– Word selection must be precise. While providing sufficient specificity to avoid confusion, it must also be flexible to accommodate contextual variation.

- **Format**

– A section within the competency standard document which introduces the scope, roles and priorities for contemporary and near future Australian OTs (including special populations and national health priority areas) would be considered beneficial.

– Contemporary competency standards must strike a balance between keeping consistent with internationally accepted concepts and philosophies of occupational therapy, whilst also recognising the influence of national context on priorities and foci for Australian occupational therapy services.

– Although the competency standards were developed initially with the view to screen internationally trained OTs, the standards now play a key role in the design of curricula. It is worth investigating whether the standards can be revised to better guide curriculum development.

– Considering that educators are charged with the responsibility of preparing future professionals to meet established standards of competency, they should be consulted during the review of competency standards. In reciprocal and complementary ways, practitioners should also be encouraged to invest in the educational preparation of future OTs, to maintain and enhance standards of practice.

– Considering the contemporary and likely future prominence of inter-professional practice, the competency standards should incorporate concepts and language that facilitates and supports collaboration with other health disciplines.

- **Uses of Competency Standards**

– The content and format of competency standards should be selected to accommodate the intended application/s of the document. Within this review, the following uses of competency standards have been identified: a benchmark to evaluate both individual practitioners and occupational therapy services; a means of maintaining and enhancing professional standards; to facilitate the development of higher level competencies; as reference for the design of entry-level education, continuing professional development training programs, and work re-entry programs; to screen internationally trained OTs; to inform service users, colleagues and employers of occupational therapy functions and responsibilities; a tool for employers to appraise workplace performance and develop job descriptions; and identify registration requirements in relevant states.

- **Frequency of Review**

– Despite the intention to create a document that would be regularly reviewed, the competencies have not been revised since their initial publication; nor do they specify a review cycle. Reviews of competency standards conducted by other countries/disciplines seem to occur at four, five, or seven year intervals. (This is based on the analysis of competency standards documents, however the writing bodies were not contacted to confirm these cycles).

– It is important to regularly review competency standards; however each review does not demand a drastic revision. Depending on how prescriptive or enabling the competency standards are formatted, and how extensive the changes in practice are since the last revision, only a minor adjustment to the document may be required.

- **Defining Competence**

– There must be national consensus on what constitutes competent performance, despite heterogeneous practice settings and client groups. The definition of competence should consider the quality of performance expected and the degree of independence expected. It should be made clear whether competencies are conceptualised as aspirational, or simply a description of the minimum acceptable performance standards that the public can consistently expect from occupational therapy services. Furthermore, it should be determined whether 'best practice' is the minimum standard for contemporary and future competent practice.

– To provide further clarification, distinction should be made between 'competent', 'excellent' and/or 'proficient' levels of performance.

– If competencies for specialty practice areas are considered inappropriate for entry-level practitioners, then there must be a definition of what is considered general practice and what is considered specialty practice. As a means of quality control and accountability, it may be necessary to specify the practice areas in which an entry-level preparation is considered insufficient and further training is required.

– Considering the increasingly accountable and litigious nature of health care services, the competencies of entry-level OTs will face increasing scrutiny. OTs are expected to provide competent services to a population of increasingly aged, diverse, chronically ill and disabled Australians in a wide variety of contexts, at entry-level to the profession.

- **Entry-Level Competence**

– Based on this review (see Appendix 2), no other international occupational therapy community or national health profession appear to define its entry-level practitioners as those within their first two years of practice. For national and international consistency, the definition of entry-level competence for Australian OTs should be revised and made comparable to international occupational therapy standards and competencies for cognate allied health disciplines.

– The competencies which students are expected to achieve in order to pass fieldwork assessments should provide a reference for the minimum competencies which can be reasonably expected of entry-level practitioners.

- **Future Developments**

– Issues for contemporary practice must be enshrined within the competency standards but near future trends must also be anticipated and considered so that practitioners and educators can ensure that the necessary competencies are developed.

– The increasing diversity of occupational therapy student cohorts will present more opportunities for expanding scope of services, so the rate of change in practice is likely to continue, if not increase.

– Changes to higher education and methods of learning (especially with the advent of information and communication technologies) and resource restraints have encouraged a departure from traditional teaching and instruction. This has implications for the standards of future generations of OTs and should be considered when establishing competencies pertaining to OTs of the near future.

- **Concepts**

– To address contemporary issues, concepts and terminology of occupational therapy and health services, language of the *Revised Minimum Standards for the Education of Occupational Therapists* and *International Classification of Functioning, Disability and Health* (WHO, 2000) should be included in the revised competency standards.

– The phrase 'knowledge, skills and attitudes/values' is used by other Australian health disciplines to describe competency. This phrase also appears in the *Revised Minimum Standards for the Education of Occupational Therapists*. Hence it would aid understanding across disciplines to use uniform terms.

– While essential to identify the foundation knowledge, skills and attitudes expected of entry-level OTs, it is equally important to identify the essential competencies which will sustain their future development and refinement of skills to accommodate the evolutionary and heterogeneous nature of practice. Lifelong learning and continuing professional development must be emphasised in the competency standards.

– Considering that domestically trained OTs will be expected to possess the generic graduate attributes of their university and apply these in practice, the general themes of these attributes should be enshrined within competencies that are also used to assess internationally trained OTs who will practise in Australia.

– As members of the Australian health workforce, OTs must possess the competencies identified as essential for Australian health care workers (see literature review in Appendix 2 for further details).

– Practising OTs operate in numerous settings outside of the traditional clinical setting, on which the current competency standards are based. The competencies should be revised to reflect these additional roles and services. Recipients of occupational therapy services now encompass more than individual clients and their families and include community, organisation, industry, and population levels.

– Considering the growing emphasis on research and continuing professional development (CPD), it may be worth providing explicit definition of the nature and frequency of these activities in the revised competency standards. CPD is mandated as part of ongoing registration in some states/territories.

Important Terms to Consider/Emphasise

- A return to occupation as the focus of intervention
- Accountability, efficiency, quality improvement, management skills
- Information and communication technology skills
- Accurate and timely documentation
- Client-centredness at individual and population levels, informed consent, advocacy, goal-directed treatment
- Evidence-based practice, research, lifelong learning and continuing professional development
- Paradigms influential to contemporary practice, e.g. cultural competence, reflective practice, occupational science
- Clinical reasoning and critical thinking
- Collaborative, inter-professional practice, team approach to health care services
- Autonomous, interdependent practice
- Adherence to organizational and legislative procedures and policies
- Education and health promotion
- Community-based models of care
- Project management

N.B. Please note that these issues/concerns are based solely on the outcomes of the literature review and required further discussion and clarification with the national OT community in the subsequent focus groups, before inclusion in the final list of recommendations.

3 Investigation Strategy or Approach Taken – Methodology

Design

A two-phase evaluation was conducted with phase one including a key stakeholder survey that informed the subsequent phase two focus group sessions. Focus group methodology is an effective qualitative research tool that utilises group dynamics to elicit a wide range of experiences, perspectives and attitudes from the participants about a topic (Plummer-D'Amato, 2008). Purposive sampling is necessary to yield information-rich data from each session (Kruegar & Casey, 2000). A series of focus groups will identify themes and trends across different groups (Hurworth, 1996) and should only conclude once few or no more new insights are provided (i.e. saturation point is reached) (Krueger and Casey, 2000).

Ethical approval for this study was provided by University of Queensland and James Cook University ethics committees. Two advisory groups were convened, to monitor project progress and generate national support and interest in the evaluation. Two OT Australia representatives were recruited to work with the project team (authors) as part of a steering committee. The reference group incorporated all the Heads of OT programs/schools in Australia who were concurrently members of Australia and New Zealand Council of Occupational Therapy Educators (ANZCOTE), representatives from the Australia and New Zealand Occupational Therapy Fieldwork Academics (ANZOTFA), and one representative from the Council of Occupational Therapists Registration Board (COTRB).

Phase 1: Preliminary Survey

Participants

Informants were selected because of their professional positions vis-à-vis academic programs and probable high familiarity with the *Standards*. In total, thirty-seven (N=37) key informants were identified and invited via email to participate in an on-line anonymous survey. Twenty-six (N=26) informants (female 85%; male 15%) participated in the survey, producing a 70% response rate. Participants' professional positions are listed in Table 7.

Survey Instrument

The authors developed the survey based on the literature review and further consultation with the project steering committee. The first section of the survey requested basic demographic details. The second section posed a series of questions (9 compulsory, 13 optional) regarding perspectives on parameters of competence, review mechanisms, format and general strengths and concerns regarding the *Standards* (see Table 8). Questions were constructed so that participants would either select their answer from a forced choice likert type scale, or respond to an open question. The authors used a design feature that restricted participants from accessing further questions until all the preceding questions were answered, thus optimising question completion. The survey was deployed using the commercially available website Zoomerang©, and made available to participants for two weeks (from 23rd November – 10th December 2007).

Table 7: Professional Positions of Participants in Phase One Survey of Key National Stakeholders

Professional Position	Number of Participants
Head of School	10
Accreditor	7
Registration board representative	3
ANOTFA/Fieldwork academic	4
OT Australia representative	4
Other: Academic	2
Other: Program/Course Coordinator/Director	3
Other: Manger of Multidisciplinary Team	1
Other: RIG Convenor and ANOTFA member	1
TOTAL	26

Table 8: Survey Questions to Key Stakeholders

Questions from Stakeholder Survey: Section 2 (compulsory)	Options (#)
Which option best describes how you use the *Standards* in every day practice?	6
At what stage of practice do you believe the competence levels should describe?	4
Do you think that the *Standards* should be reviewed regularly?	3
How often do you think they should be reviewed?	4
Is the current format of the document: Useful? Relevant? Appropriate to Contemporary practice? Future-oriented?	3 each
Is there a need for any additional units of competence?	2
Do these 7 units of competence adequately cover the scope of OT practice?	2
Is there an aspect of Occupational Therapy practice which is not adequately addressed in the *Standards*?	2
Is the current and potentially future range of practice settings adequately addressed by the current competencies?	2

Analysis

Upon closure of the survey, the Zoomerang© software automatically collated the data in terms of frequencies and percentages of responses to each question, and provided lists of responses from each open question.

Phase 2: Focus Groups

Participants

The project team conducted a national series of focus groups between February and April 2008. In total, 13 focus groups were held in the five Australian states which contain all schools of OT, including the two new programs undergoing provisional accreditation (Queensland n=3, New South Wales n=4, Victoria n=3, Western Australia n=2, and South Australia n=1). The project team wished to consult with all states and territories in the evaluation. Consequently, a teleconference was held with occupational therapy representatives (n=6) from the three states/territories without an occupational therapy school (Australian Capital Territory, Northern Territory and Tasmania) to discuss and affirm the outcomes from the focus groups. Once advised of the project team's requirements, Heads of each academic OT program recruited local stakeholders from a wide variety of settings and backgrounds. Heads identified potential participants with varying experiences, working with and in diverse caseloads and practice settings. The participants represented a conglomerate of professional groups, namely academics, clinicians/employers who supervise students or new graduates, recent graduates, local OT Australia members and OT Australia accreditation panellists, and OT Registration Board members where applicable.

Procedure

Prior to convening each focus group, copies of the *Standards* were posted to individual participants in order to increase their familiarity with the document. This preparation was considered critical by the project team in order to generate informed and insightful discussion, and consequently information-rich data. Participants also received an information sheet and consent form to complete before each focus group commenced.

A venue for each focus group was provided by the local university, and each session lasted 90–120 minutes. Focus group questions were informed by the findings of the preliminary phase one survey, and a literature review. While sessions were structured to collect information on pertinent issues identified prior to each session, the format remained sufficiently flexible to accommodate the natural flow of group discussions.

The project officer attended and moderated all 13 focus groups, and also attended the validation teleconference. In nearly half of the focus groups (n=6), another project team member was present and assumed the role of co-facilitator. Each focus group discussion was recorded on a Digital Voice Recorder (DVR) and subsequently transcribed. The project officer, and where applicable also the co-facilitator, noted significant events/themes/answers in a diary upon conclusion of the discussion.

Analysis

Both peer and member checking (Patton, 2002) were conducted to enhance the rigour of the thematic analysis of the focus groups. Peer review of the themes emerging from focus group transcripts was undertaken by two members of the project team to ensure consensus regarding emergent themes. Three stages of member checking occurred. First, individual participants from each focus group received a written summary of the key themes emerging from their discussion for comment to verify the data collected and preliminary interpretations. Second, the key preliminary themes/recommendations arising from Phases 1 and 2 were presented to all Heads of Schools at the annual ANZCOTE meeting in May 2008 for feedback regarding the authors' thematic interpretation. Third, a teleconference was convened with representatives from the three states/territories without occupational therapy Schools to discuss the key focus group findings. At each level, there was general consensus regarding the themes and recommendations presented.

4 Findings and Outcomes

Summary of Survey Results

All respondents were aged 30 years and older, with a minimum 11 years experience as an occupational therapist. The majority (85%) had experience with curriculum design, with over half of these (58%) having at least 7 years experience designing curriculum, and 65% assuming major responsibility for overall curriculum direction/design. Of the 10 Heads of school who responded, eight reported using the competencies as a reference during curriculum design, and seven reported using them during accreditation in preparation of self-study modules. While it could be interpreted that the majority of programs reference the *Standards,* one Head further clarified their response: "We *need* to take them into account but they are largely irrelevant/outdated".

The majority of participants (81%) disagreed with specifying competence at the end of the first two years of practice; the more popular options were within one year of graduation (42%) and at graduation (35%). Support was unanimous for establishing a regular review cycle; the most popular cycle length was five years (69%). The majority of participants considered the current format of the competencies (i.e., Australian Qualifications Framework) useful (81%) and relevant (73%). More than half indicated that the format was appropriate to contemporary practice (58%), although almost one fifth (19%) were unsure.

There was strong opinion that the seven units of competence did not adequately cover the scope of contemporary practice (73%). Over half of participants (58%) indicated that additional units were needed – "the scope of practice has changed considerably since the competencies were developed". More than two thirds (69%) believed that there were aspects of occupational therapy practice that are not adequately addressed in the current standards; one participant commented that competencies "need to maintain currency with the changing parameters of practice".

According to the Heads of Schools, generic graduate attributes were essential to curriculum development as part of university requirements. Although aligning the generic graduate attributes (GGAs) with OT specific competencies was considered a rather tedious exercise, there was strong consensus that there was considerable compatibility between the GGAs and discipline-specific competencies. The GGAs are "used to shape the ways in which core OT competencies are attained, rather than being pursued in addition to the competencies."

Summary of Focus Group Results

In total 152 people attended the focus groups, with group size ranging from nine to 16. The length of occupational therapy work experience ranged from new graduates yet to commence practice, to practitioners with over 40 years experience. Participants represented a wide range of practice areas including mental health, acute settings, paediatrics, occupational rehabilitation, community-based rehabilitation, driving, academia, and private practice. Amongst them were representatives from a wide range of professional positions and organisations. Several were non-OT managers responsible for supervision of occupational therapists. The results will be discussed under five thematic headings; (1) availability and review cycles, (2) defining entry level competencies, (3) formatting and presentation, (4) appropriate uses of the document and (5) general and specific content.

Availability and Review Cycles

A significant number of focus group participants (>50%) were unaware of the existence of the *Standards* prior to their involvement in this study. Those who were aware were largely academics and/or were involved with accreditation of academic programs, or were members of state registration boards. All participants acknowledged that the document was not well known in their local practice community. There was unanimous support amongst participants that the *Standards* should be freely and readily accessible to all occupational therapists, students and the public. Similar consensus supported the need for a regular review cycle. The preferred cycle was five years (supported by 7 groups), followed by seven to ten years (supported by 3 focus groups). Based on the focus group discussions, it was believed that OT Australia should be responsible for orchestrating and coordinating a regular review of the *Standards.*

Defining Entry-Level Competence

Many participants were concerned that the *Standards* reflected competence within two years post graduation. Defining 'entry-level' therefore became a contentious issue across all 13 focus groups. According to general consensus, a practitioner experiences such significant professional growth within their first two years of practice that it would be considered extremely difficult to represent this within the scope of one document. There was little support for continuing with the description of 'entry-level' in the *Standards*. In particular, Registration Board representatives indicated that therapists are registered to practice as competent at the time of graduation on the premise that completing an accredited program is sufficient preparation to enable beginning competent practice. Furthermore, many participants voiced the concern that the public assumes and expects registered health professionals to be competent upon graduation (and registered if relevant), not two years after graduation.

Thus there was strong consensus that the document should establish a minimum list of core competencies demonstrated at graduation which are transferrable regardless of practice area (supported by 11 focus groups; the other two groups also believed at graduation but desired a six to 12 month window for consolidation). Since the standards were widely considered a performance measure for new graduates and internationally trained occupational therapists, there was very limited support for defining superior levels of performance to competent, such as 'proficient' or 'excellent'. In accordance with this argument, many believed it also unnecessary to define 'specialist' practice and preferred to keep the scope of the standards generic. However, participants were generally in favour of including a statement to acknowledge that certain areas of practice require additional support, qualifications or training above and beyond that of entry-level preparation. While there was considerable support for developing national competency standards for specific areas of practice (e.g., driving), this was regarded as a lesser priority than revising the current standards. A number of individual state and interest groups have started developing, in a somewhat *ad hoc* fashion, specialist practice competency standards (e.g., medico-legal, home modifications). Strong consensus amongst participants was that development of these specialty standards should be centrally orchestrated by OT Australia, to avoid unnecessary replication/ duplication.

Format and Presentation of Competency Standards

The format and design of the standards is consistent with the Australian Qualifications Framework (ALIA, 2007), which is also used by cognate allied health disciplines throughout Australia. Participants agreed that this format was useful for both clinical and educational purposes. As one participant commented, "it's really the content that's its limiting factor, not its format". However, some concerns was registered that the term cues was "misleading"; words such as 'examples', 'triggers', or 'potential indicators' were suggested as more appropriate. Some cues were also noted as considerations rather than observable, measurable behaviours. For example, 'interpreter' and 'social justice principles'.

Most participants found the length of the *Standards* both excessive and cumbersome. This was reported to detract from the utility of the document. Suggestions to facilitate use of the document included an executive summary, diagrammatic representation of the units, and matrix tables of the competencies. A particularly popular option was to decrease the number of cues listed to provide space for individual practitioners to insert cues relevant to their local context. There was strong support for an expanded introduction or preamble to the standards, which would provide an overview of occupational therapy practice in the Australian context and cover topics such as the purpose and potential functions of the document, acknowledging the dynamic and evolutionary nature of practice, and enshrining key philosophies such as the client-centred approach and the inherent value of occupation.

Uses of the Document

Although the document was originally intended to provide a benchmark for internationally trained occupational therapists, the unanimous opinion was that the primary roles of the document were to inform (1) the accreditation process for national occupational therapy programs, and (2) the design and assessment of curriculum content of Australian occupational therapy programs. There was also strong support for recognising other potential functions of the document, including

informing the development of more specific and/or higher level competency standards, supporting performance management of individual therapists, informing the screening of internationally trained therapists, and facilitating development of entry-level job descriptions. Practitioners from mental health backgrounds reported that the *Australian Competency Standards for Occupational Therapists in Mental Health* © (OT Australia, 1999) took precedence over the *Standards* in this area of practice.

The link between the *Standards* and registration of individual OTs is indirect, given that the competencies are used by OT Australia to accredit programs (not individuals). Individuals who graduate from accredited programs are eligible for registration in Australian states with registration. General opinion is that changes proposed to the registration system if anything may increase the importance of the competencies, given that accreditation of programs will be one of the key means of ensuring quality should registration be discontinued and national registration for OT not be progressed.

General and Specific Content

Consistent themes across all focus groups in relation to general content included the need for:

1. More contemporary occupational language,
2. Acknowledgement of contemporary occupational therapy philosophies, models and international frameworks such as the *International Classification of Disability, Functioning and Health* (ICF) (WHO, 2001),
3. An emphasis on partnerships and client-centred practice,
4. An emphasis on community and population level interventions (in addition to individual interventions) and the expanding scope of practice to incorporate new roles, settings and contexts for practice (e.g. community-based, consultancy, case management),
5. An emphasis on clinical reasoning, evidence based practice and inter-professional teamwork,
6. Competence in the professional and ethical use of information and communication technologies, with respect particularly to client information and practitioner conduct,
7. Provision of a broad range of cues, i.e. departing from the strong medical/hospital orientation in the current document to incorporate the range of contemporary practice areas,
8. Contemporary and consistent definitions of client, consumer, and service user, as well as service providers, and
9. Acknowledgement of local contexts in relation to workplace guidelines and policies, as well as national and state/territory legislation impacting on service delivery (e.g., Disability Discrimination Act, Freedom of Information Act and Occupational Health and Safety legislation).

Specific comments are summarised below in relation to each of the seven units of competence.

Unit 1: Professional Attitudes and Behaviour

There was some overlap between elements in Units 1 and 7. For example, some focused on safe work procedures which seemed more appropriate to include in management issues rather than professionalism (e.g. Element 1.7). There was unanimous support for the first unit to convey the professional identity and philosophical stance which underpins the occupational therapy process. Nine groups opposed the implication that membership to OT Australia was a mandatory element of competency (Element 1.10); instead suggesting a more appropriate focus would be on professional membership and association with professional groups which would accommodate the growing number of therapists working in generic health positions (e.g. case management, occupational health and safety).

Unit 2: Roles, Performance and Functional Level of Individuals and Groups

It was widely agreed that this unit was one of the more prescriptive and consequently less transferable to the diverse range of practice settings and the non-traditional occupational therapy roles. Even the title was identified as inappropriately focused on medical/clinical settings and direct intervention roles. The elements reflect the dated expert approach instead of the contemporary partnership or collaborative approach with service users. Many participants

identified an inappropriate focus on the physical aspects of the person and their physical environment, resulting in the relative neglect of assessing occupations and the social, cultural, temporal and/or institutional aspects of the environment. Another concern widely voiced (particularly by those working in mental health) was an out-dated emphasis on identifying deficits instead of the contemporary strengths and recovery models.

Unit 3: Implementation of Individual and Group Interventions

With reference to the previous unit, participants were even more concerned regarding the overt and outdated focus in Unit 3 on the physical aspects of the person and environment. There appeared to be a lack of collaboration with the client/service user and limited scope for contemporary and indirect service roles (such as consultancy). The specificity of detail not only limits generalisation across all practice settings but creates a comparatively large number of elements (15), which may misrepresent this unit's importance within the standards.

Unit 4: Evaluation of Occupational Therapy Programmes

Many participants indicated that with relatively few elements (three), the importance of Unit 4 is undervalued when compared to the preceding unit. A universal theme throughout the focus groups was the need to enshrine evaluation within this unit as an ongoing, continuous process involving reflective clinical reasoning at multiple points, as opposed to its current focus on evaluation only at the end-point of intervention. Participants further commented on the lack of incorporation of multiple stakeholder perspectives, and absence of contemporary concepts such as continuous improvement, quality improvement, and evidence-based practice. The role of occupational therapists in research was considered more appropriately placed in units 6 or 7.

Unit 5: Documentation and Dissemination of Professional Information

There was general consensus that it was important to include within this unit the need to abide by clinical protocols and regulations as per workplace and legislative requirements. Considering the modern influx of information and communication technologies (ICT) in most workplace settings, participants recommended addressing ethical considerations for using ICT. Many groups were supportive of expanding this unit so that documentation and dissemination were addressed in more detail, for example considerations for different target audiences.

Unit 6: Professional Education

Within each focus group, a key discussion point was determining the intended recipient of this 'education'. Specifically, the participants sought clarification as to whether the focus was on self-education, student education, or education of others about occupational therapy services. It was strongly argued across the country that continuing professional development (CPD) and supporting development of the profession should be the critical foci of this unit. There was strong support for recognising the mutual responsibilities of students, practitioners/supervisors and universities to facilitate successful learning outcomes. It was also considered important to note that involvement in or contribution to the education of occupational therapy and health professional students is considered as a part of professional responsibility from the commencement of practice. This 'contribution' would be commensurate with experience; fieldwork educators are expected to have at least two years experience according to the WFOT (2002) education guidelines.

Unit 7: Management of Occupational Therapy Practice

As described previously, there was consensus about some overlap between elements in Units 1 and 7 (e.g. Element 7.4). Furthermore, the content of this unit was considered rather prescriptive (e.g. petty cash system is accurately maintained) and in some cases redundant (e.g. shows brochures, uses diary). There was general consensus amongst participants that this unit should reflect the responsibilities within a workplace other than client services which enable efficient and quality services. This would include utilising a systematic approach to managing one's workload, requiring skills such as delegation and prioritisation. In addition, reference should be made to concepts including quality assurance, occupational health and safety, and workplace risk management.

5 General Lessons of Value to Other Projects

Processes and Interaction of the Project Team

Finding time for the entire project team to meet at the outset was considered critical. If a team is unable to meet face to face, we advise it be flexible and prepared to utilise other options (e.g. teleconference, email). Planning more regular team discussions at the beginning of the project was valuable in establishing focus, direction and expectations for the remainder of the project. By reviewing the project plan regularly, and establishing and adhering to clear time frames, the project progressed according to schedule. The team would also regularly schedule a team meeting directly before meeting with the steering committee and reference group, in order to clarify thoughts, plans, and expected outcomes from those meetings with stakeholders. Although the project team had access to sophisticated communication technology (Elluminate), we preferred to utilise more pedestrian methods (i.e. phone, email) since it required no further training and the more basic media was sufficient for the team's requirements. Employing a capable and dedicated project manager, who possessed both project management and discipline-specific content skills, was considered important to the success of the project. However, it is also very important that all members of the team are able to prioritise time to work on the project. Team work was critical to the project's success and further enabled by identifying appropriate mechanisms for communicating across the team.

Stakeholders and Communication

Recruitment to the steering committee and reference group was important to ensure that a wide range of stakeholder opinions were canvassed. The team utilised regular and multiple methods of communicating with stakeholders (e.g., project newsletter, regular teleconferences, email broadcasts). These open and regular channels of communication assisted with establishing goodwill with the stakeholders, which of course was extremely critical to the success and acceptance of the project within the professional community.

6 Reflections on the State of the Discipline/ Area of Study and its Future Development

This project has aroused further national interest in revising the competency standards. The time is right – there is sufficient momentum from this project to build upon our preliminary work and continue the revision process for the OT Competency Standards. This project has also coincided with a project led by OT Australia to review the national accreditation process for occupational therapy programs. The Project Director (Rodger) was invited to become a member of the accreditation review panel. The timing of these two projects will allow for congruence between the revisions of the OT Competency Standards and the accreditation process for OT programs.

Interestingly, this project has identified forces within the profession that are requesting the introduction of 'specialist' competency standards, e.g., driving, work rehabilitation. These forces accordingly recognise the importance of first updating and confirming contemporary graduate competencies, to provide a basis for the further development of specialist competencies.

Concurrent with this project, the various OT programs (including UQ) are undergoing significant curriculum review and reform. These projects have involved, to varying degrees, a review of the generic graduate attributes and their engagement with the occupational therapy-specific competencies. Particularly, examining the role of the GGAs and the OT competencies as pertinent drivers for curriculum development and renewal has been considered important.

A contentious issue nationally is the potential introduction of national registration (currently only four states/territories have registration). The OT Competency Standards document is very important for promoting nationally consistent expectations for new gradates, in the absence of national registration.

This project has provided a shared purpose and therefore galvanised the relationships between and within the Australian and New Zealand Council of Occupational Therapy Educators (ANZCOTE) and the Australian and New Zealand Occupational Therapy Fieldwork Academics (ANZOTFA).

7 Evaluation Outcomes

Informal evaluation occurred regularly throughout the project during discussions amongst the project team members. Formal formative evaluation was also completed, timed to coincide with meetings with the steering committee and reference group. Accordingly, members of the project team, steering committee and reference group completed formative evaluation (templates were developed by the project team) at regular intervals throughout the project. The results are summarised below in Table 9. The rating scale (1–3) is provided below Table 9.

A summative evaluation form was also developed by the project team and distributed to coincide with the final steering committee and reference group meetings. This form was completed by members of the project team, steering committee and reference group. The results are summarised in Table 10.

In summary, the key stakeholders were generally very satisfied with the processes/procedures in place to manage the project, the timeliness of reaching project milestones, level of consultation, appropriateness of stakeholder participation, adequacy of reporting and documentation of findings and impact of project on the discipline. These views are shared across the reference group, steering committee, and project team members.

Table 9: Summary from Results of Formative Evaluation

Question: Rate the extent to which the project...	Month 3 (Average Score) (SC+PT=5ppl)	Month 6 (Average Score) (SC+RG+PT=10ppl)
... remains true to its initiatl goals/objectives.	3	3
...has achieved tasks/milestones within specified timeframes.	3	3
...has identified all relevant stakeholders for participation in project activities.	3	3
...has consulted and collaborated with stakeholders.	2.6	2.95

Rating Scale:
1 = Significant work still required/problematic
2 = Ok, some clarification/more effort required
3 = Strength of project, no improvements needed

PT = Project Team
SC = Steering Committee
RG = Reference Group

Table 10: Summary from Results of Summative Evaluation

Question: According to the rating scale, whether:	Reference Group (average)	Steering Committee (average)	Project Team (average)
I intend to share information from this project with my colleagues.	4.3	4	4.6
I will recommend actions arising from this review and/or further discuss the issues identified to appropriate groups or colleagues in my organisation/ discipline/network.	4.5	4.5	4.8
The project achieved its intended outcomes.	5	4.5	4.8
Project outcomes (i.e. recommendations) were valuable.	4.8	5	5
The operational processes (i.e. literature review, survey & focus groups) were appropriate to achieve intended outcomes.	5	5	5
Tasks/milestones were achieved within specified timeframes.	5	4.5	4.8
The project team consulted & collaborated with stakeholders appropriately.	5	4.5	5
All relevant stakeholders were identified to participate in project activities.	5	4.5	4.8
Appropriate measures have been put in place to promote sustainability of the project's outcomes.	4.5	4	4.6
Appropriate reporting/disseminating strategies have been used.	4.8	4.5	5
The project met a previously unmet need for stakeholders and or the community.	5	4	4.6
The project is likely to have impact on the discipline/institutions/association.	5	5	4.6

Rating Scale: 1 = Strongly Disagree; 2 = Disagree; 3 = Neutral/Undecided; 4 = Agree; 5 = Strongly Agree

Lessons from this project of value/worth to other projects? (All comments received from project team)	– Importance of a project manager with project management skills – Importance of clear time frames and project plans – Importance of teamwork and mechanisms for communicating across the team – Reference group and steering committee worked very well – Time for project team to work on the project must be a priority for all team members – An example of best practice in research involvement and dissemination of information – Funding opportunities and priorities are volatile so should always take note of alternative funding opportunities
Suggestions for how project could have been improved? (All comments received from project team members)	– Excellent as is – One face-to-face PT meeting could have been valuable

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Appendices

Appendix 1

Participating Institutions

- OT Australia (National): 2 representatives from the National Council were engaged with the project team via membership of the Steering Committee.
- Council of Occupational Therapists Registration Boards (COTRB) represented by membership of Reference Group
- Australian and New Zealand Occupational Therapy Fieldwork Academics (ANZOTFA) represented by membership of Reference Group
- Australia and New Zealand College of Occupational Therapy (ANZCOTE) represented by membership of Reference Group. ANZCOTE represents heads of each occupational therapy program in the 13 institutions in Australia:
  - (1) The University of Queensland (QLD)
  - (2) James Cook University (QLD)
  - (3) University of the Sunshine Coast (QLD)
  - (4) Charles Sturt University (NSW)
  - (5) University of Newcastle (NSW)
  - (6) University of Sydney (NSW)
  - (7) University of Western Sydney (NSW)
  - (8) La Trobe University (VIC)
  - (9) Deakin University (VIC)
  - (10) Monash University (VIC)
  - (11) University of South Australia (SA)
  - (12) Edith Cowan University (WA)
  - (13) Curtin University (WA)

Appendix 2

Literature Review: Competency Standards and Occupational Therapy

ALTC Project:

Mapping the Future of Occupational Therapy Education in the 21st Century: Review and Analysis of Existing Australian Competency Standards for Entry-Level Occupational Therapists and their Impact on Occupational Therapy Curricula across Australia

Literature Review:
Competency Standards and Occupational Therapy

29 February, 2008

Authors:
Rebecca Banks, Sylvia Rodger, Michele Clark, Mia O'Brien, and Kay Martinez.

Contents

INTRODUCTION

The nature of professional practice is dynamic and subject to frequent change. Occupational Therapists (OTs) are expected to respond to expanding knowledge and shifting socio-cultural contexts, and continue to provide high quality services commensurate with community demands. As practice adapts to accommodate public needs and values, perceptions of what constitutes competent performance are also modified and redefined. "Competence is not static but unfolds and evolves" (Alsop, 2001, p.263). A commitment to regular review and re-evaluation of its priorities will enable the occupational therapy profession to capitalise on opportunities for further development and encourage the emergence of new practice areas and specialties.

Within the Australian health care environment, occupational therapy is renowned for its versatility. "Diversity has become a hallmark of occupational therapy, in terms of both the client populations that occupational therapists work with and the practice settings in which they are located" (Whiteford & Wright St-Clair, 2002, p.129). The occupational therapy profession has a chameleon-like nature: it can respond to priorities and needs of clients, practice settings and fellow health professionals by adapting its skills and assuming different roles. While intrinsic to and celebrated by the profession, this adaptability also provides a challenge for those seeking a comprehensive and consistent definition of occupational therapy and the services it provides.

Since the introduction of the *Australian Competency Standards for Entry Level Occupational Therapists* © (OT AUSTRALIA) in 1994, Australia and its health care needs have changed considerably. Occupational therapy practice has evolved accordingly and it is unclear whether the competency standards are still relevant. Despite the intention to create "a working document which will be periodically reviewed and revised" (p.2), the competency standards have not been modified since their initial inception. It is imperative that competency standards retain their currency to accurately reflect a profession's character and function. "The dynamic nature of practice, which is always changing and developing, means that competence [and standards regulating competence] also must be changing and growing" (Youngstrom, 1998, p.717). Competency standard documents embody a profession's critical philosophies, purpose and scope. They are a public declaration of the attitudes and values which underpin service, and may also identify the aspects of task performance observable in the workplace. Every competency integrates elements of intellectual and interpersonal competence, against the backdrop of public, academic and professional obligations (Walsh, 2002). Competency standard documents mandate the standards of practice which practitioners are obligated to provide.

The *Australian Competency Standards for Entry Level Occupational Therapists* © (OT AUSTRALIA, 1994) not only defines and maintains levels of competence within the profession, but also influences the design of occupational therapy education programs. The national professional body, The Australian Association of Occupational Therapists (OT AUSTRALIA), utilizes this document during its accreditation of Australian occupational therapy programs. This highlights the importance of competency standards reflecting not just contemporary but also future practice, to ensure that graduate occupational therapists possess the requisite skills and knowledge upon entry to the profession. Considering the magnitude of change in the 13 years since the competency standards were first published, the need for review has become increasingly critical to ensure that educational curricula are consistent with contemporary philosophy, research, values and theories underpinning practice. "We need a position on professional concepts and processes which reflect our national heritage, national achievements and the challenges which face our society in the century ahead" (Cusick, 2001, p.115).

The *Australian Competency Standards for Entry Level Occupational Therapists* © (OT AUSTRALIA, 1994) is not the only document consulted by educators when designing curricula. They must also reference the *Revised Minimum Standards for the Education of Occupational Therapists* (WFOT, 2002), which identifies the essential aspects of content, process and accountability mechanisms which must be incorporated into an occupational therapy program to satisfy international requirements. Furthermore, the occupational therapy

program must address the generic graduate attributes specified by its home university. Occupational therapy educators must integrate the directives from these three documents in the design of curriculum. The disparity between the multiple sets of university generic graduate attributes constitutes further contextual complexities which may need to be considered in revised competency standards to guide the curriculum design for future generations of OTs.

The intent of this literature review is to identify key issues for review of the *Australian Competency Standards for Entry Level Occupational Therapists* © (OT AUSTRALIA, 1994). These issues will be later discussed with representative occupational therapists on a national scale during a series of focus groups in 2008. Section 1 of the literature review addresses the meanings of competence, the generic essential and desirable features of competency standards, education of health professionals, and a summary of changes in contemporary healthcare since 1994. In Section 2, the structure and content of the *Australian Competency Standards for Entry Level Therapists* © (OT AUSTRALIA, 1994) is compared and contrasted with other official competency standards documents. This includes the two documents previously mentioned that directly impact upon the design of occupational therapy curricula; and also competency standards of health services and other health disciplines in Australia, and occupational therapy competencies from other countries. Derived from this analysis is a set of proposed approaches and key concepts which will inform the subsequent consultation and recommendations phases of this project.

SECTION 1: Competence, Competency Standards, & Contemporary Standards for Practice and Education of the Australian Health Workforce

1.1 The Challenge of Defining Competence

Pivotal to the compilation of competency-based standards which accurately represent the functions of a profession is the determination of an unequivocal and undisputed definition of competence. The sheer volume of literature contesting the meanings and connotations of competence, and the plethora of definitions available, testify to the confusion and uncertainty surrounding the concept, especially as it pertains to professional practice. The challenge of defining competence is further complicated in the field of occupational therapy by the absence of a universally agreed definition of the profession (Courtney & Farnworth, 2003). Indeed, when Fawcett and Strickland (1998) convened 39 American occupational therapists to discuss the features of competence in occupational therapy, not only did reaching group consensus prove difficult, but practitioners also struggled to articulate their own perceptions of competence. If the profession intends to use competence as the yardstick against which the quality of its members are measured, it is critical that the profession's understanding of what it means to be competent is universally understood and accepted. A representative sample of definitions of competence is provided in Table 1. Despite the number and variety of definitions, there are several recurring themes which merit discussion.

To be competent as a health practitioner requires more than the mere execution of a circumscribed set of specific, technical skills (Alsop, 2001; Courtney & Farnworth, 2003; Dall'alba & Sandberg, 1996; Hager & Gonczi, 1991; Youngstrom, 1998). A comprehensive definition of competence must consider not only the essential knowledge and skills to meet job demands, but also the tacit aspects of an individual's integrity and ethical attitudes which influence his/her performance (Youngstrom, 1998). The competent practitioner is expected to exercise judicious and reasoned application of their intellect and psychomotor skills to meet the expectations of their clients and work environment (Hager & Gonczi, 1991; Mitcham, 2003). It is the intangible and subjective nature of these components of competence, and the difficulty in describing objectively their integration into work tasks, which makes an explicit definition difficult. Models of competence (see Figure 1) often depict multiple, concurrent components of competence which illustrates its multi-faceted nature.

Figure 1: Mansfield and Matthew's Job Competence Model (1985)

Task Management i.e. the skills necessary to coordinate and manage the job role	**Task Skills** i.e. the skills to do the job
Environmental Management i.e. the awareness of how work is affected by external issues	**Contingency Management** i.e. the ability to manage variance and contingency

(Mansfield & Matthews, 1985)

Table 1: Representative Sample of Definitions of 'Competence'

Definition of Competence	**Source**
1. The quality of being competent; adequacy; due qualification or capacity *Competent:* Fitting, suitable, or sufficient for the purpose; adequate.	(Macquarie University, 2001, p.226)
The type of quality of performance necessary to function properly in a given situation, expressed in terms of clear, measurable, objective outcomes that implicitly or explicitly define the knowledge, skills, values, and personal characteristics required to produce the performance.	(Bossers, Miller, Polatajko, & Hartley, 2002, p.11)
A combination of attributes underlying some aspect of successful professional performance	(Hager & Gonczi, 1991, p.27)
Involves both objective aspects, such as knowledge and manual skill, and subjective aspects, such as personal attitudes and values.	(Youngstrom, 1998, p.716)
Consists of any set of criteria that describes the qualifications, capabilities, levels of mastery, and degree of expertise required for a specified role	(Abreu, Peloquin, & Ottenbacher, 1998, p.751)
The ability to perform the activities within an occupation or function to the standard expected in employment	(ALIA, 2007, Retrieved September 11, 2007, from http://alia.org.au)
The skills, abilities, knowledge, behaviours and attitudes that are instrumental in the delivery of desired results, and, consequently, of job performance.	(World Health Organisation, 2005)
The habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individuals and community being served.	(Greiner & Knebel, 2003, p.24)
Characterized by appropriate speed and freedom from errors, clinical judgment, understanding, and independence to being unsupervised professional practice. Responsibility for assuring quality and for continued professional growth have been transferred to the [individual].	(Chambers & Glassman, 1997, p.664)

There is also strong evidence suggesting that competence is a necessary achievement before a practitioner can perform at a higher or more sophisticated level. According to Schkade (1999), once an individual has attained competence his/her potential for excellence, adaptation to change, and transferring skills to other tasks is at its greatest. One survey of 297 nurses representing diverse clinical areas (Scholes & Endacott, 2003) found that regardless of context, an individual was presumed competent when he/she was capable of teaching less experienced colleagues, or could assume management of a small group under supervision.

Chambers (1994) believed that a readiness for independence in practice is characteristic of a competent practitioner. These arguments support the idea that a competent practitioner is one who not only performs the basic, essential tasks of his/her role, but also has some capability to regulate his/her own practice. Competent practitioners possess the necessary insight into their own abilities to determine whether they are competent to perform the task. Many authors agree that an essential feature of competence is an internal impetus to pursue lifelong learning, the volition to identify and cultivate the necessary skills for job performance (Alsop, 2001; Fawcett & Strickland, 1998; Hinojosa & Blount, 1998; Schkade, 1999). This alludes to the dual nature of competence; that it can be conceputalised as both an end-point, and an ideal (Rolls, 1997).

This perception of competence as an ideal leads to another matter of contention in defining competence. Several authors insist that the term does not indicate high achievement and in fact describes only the most basic, minimum level of performance considered acceptable (Hyland, 1997; Lum, 1999). "Competency incorporates understanding, skill, and values in an integrated response to the full range of requirements presenting in practice. The level of performance requires some degree of speed and accuracy consistent with patient well-being but not performance at the highest level possible. It also requires an awareness of what constitutes acceptable performance under the circumstances and desire for self-improvement" (Chambers, 1994, p.364). Alsop (2001) stated that competence is in fact a dichotomous concept: an individual either is, or is not, competent. Yet as McAllister (2006) highlighted in her thesis, the inconsistent and indiscriminate use of competence in descriptions of job performance has encouraged beliefs that competence can be measured along a spectrum. The term 'competence' has been used to encompass the degrees of expertise required in practice (Abreu et al., 1998). Another concern regarding the quality of competent performance has been raised by Rolls (1997). She posed the dilemma that if the contemporary standard for practice is 'good' or 'best' practice, does this imply that the minimum expectation of performance is of higher caliber than simply adequate? While 'best' practice should certainly be aspired to by health professionals, it may not be reasonable to expect all practitioners, and certainly not entry-level practitioners, to consistently meet this standard (McAllister, 2006).

To confer an individual with a professional qualification implies that he/she has demonstrated the necessary performance in that discipline to be considered competent to begin practice (Alsop, 2003; Chambers, 1994; Rolls, 1997). However, popular learning theories such as Benner's (1981) would challenge the presumption that a health professional is competent at entry level. Benner's work is based on the Dreyfus Model of Skill Acquisition (Dreyfuss & Dreyfuss, 1986). Although intended to chart the professional development of nurses, this model is often generalised across the health disciplines. According to Benner, in the development of skilled performance the learner progresses through three key concepts: (a) from dependence on theory and principles to clinical experiences as reference for clinical decision-making, (b) from perceiving a situation as a compilation of equally important however distinct components to an integrated and holistic understanding of the situation, and (c) from the perspective of an uninvolved observer to an actively engaged participant. Within each concept the learner progresses sequentially through 5 discrete stages: novice, advanced beginner, competent, proficient, and expert (2001). Benner believed that before progressing to the next stage, the learner must refine their skill and accumulate the necessary experience. A competent practitioner is defined as someone with a minimum of 2-3 years experience working in a specific role. "The competent [practitioner] lacks the speed and flexibility of the proficient [practitioner] but does have a feeling of mastery and the ability to cope with and manage the many contingencies of clinical [practice]" (Benner, 2001, p.27). Benner argued that a 'probationary' period is necessary for learners to adapt and apply their theoretical knowledge and simulated learning experiences to the real life context. So regardless of their prior experience, practitioners who enter a new area of practice are relegated to the 'novice' or 'advanced beginner' level of performance alongside students, entry-level and recently graduated professionals. There is objection to the merits of conceptualizing skill development in a sequential, linear fashion (Kasar & Muscari, 2000), and limited evidence regarding the length of time required to consolidate the theoretical and practical knowledge acquired in professional preparation programs in practice (Ledgerd, 2005). However, the first year of entry-level practice has been recognized as a period of significant professional growth (Tryssenaar & Perkins, 2001), with the first six months in particular necessary for an

entry-level practitioner to appear 'comfortable' in their workplace (Barnitt & Salmond, 2000; Bush, Powell, & Herzberg, 1993).

Despite the debate over the nature and rate of developing skilled performance, there is consensus that the performance of an entry-level practitioner is quite distinct from that of a practitioner with several years of experience (Chambers & Glassman, 1997; Ferraro Coates & Crist, 2004; Lannin & Longland, 2003; McNulty, Crowe, & VanLeit, 2004; Walsh, 2002). This appears to be related to the aforementioned 'comfort' demonstrated in the practice environment. The process adopted by the entry-level professional is more procedural, based on theoretical knowledge and experiences supplied by the university education (Tryssenaar & Perkins, 2001). However rules can only cover a finite number of situations, thus when presented with a complex or novel situation, the entry-level practitioner requires support (Chambers & Glassman, 1997). More experienced health professionals have broadened their repertoire of skills beyond those instilled at entry level, and can integrate the knowledge and skills from their initial education with their clinical experiences to accommodate and respond to the uncertainties encountered in practice (Ferraro Coates & Crist, 2004; Jensen, Shepard, & Hack, 1990; Yarmo-Roberts, 2007). "Competence on qualification serves as the foundation on which professional development takes place. This includes maintaining competence to practice and then developing breadth and depth of knowledge and skills to extend practice" (Alsop, 2003, p.263).

The importance of context in considerations of competent practice is highlighted by an extensive body of literature (Alsop, 2001; Buchan & Dal Poz, 2002; Dall'alba & Sandberg, 1996; Fawcett & Strickland, 1998; Gahnstrom-Strandqvist, Tham, Josephsson, & Borell, 2000; Hager, 2004; Walsh, 2002). The participants in Fawcett and Strickland's (1998) focus groups emphasized that because of the breadth and diversity of occupational therapy practice, definitions of competence must be sensitive to contextual variations. "Every competency includes particular components of intellectual and interpersonal competence, and each of these are set within an environment of public, academic and professional expectations" (Walsh, 2002, p.2). Based on their small phenomenological study with experienced occupational therapists who had been identified as "good" by their colleagues, one team of researchers concluded that "the higher the level of a person's acquired competence, the more evident it is that competence is dependent on the context" (Gahnstrom-Strandqvist et al., 2000, p.23). The researchers also believed that despite the diversity and variation in caseloads and practice settings, the therapists in their sample shared a common meaning structure underpinning their practice. So while occupational therapy is characterised by a body of knowledge, skills and values, demonstration and interpretation of these attributes is highly contingent on multiple circumstances including the disposition of the individual practitioner, the individual client, the professional role, the professional task, and environmental settings and policies (Buchan & Dal Poz, 2002; Chambers, 1994; Youngstrom, 1998). Competence is a relative term, dependent on its context. As Hager (2004) remarked, each work environment contains its own unique 'skill ecosystems'.

Finally, it is important to emphasise that a definition of competence must take into account the expectations of service users. Lum (2004) presented an interesting example based on the works of Ryle (1949), to illustrate this point. If watching a tumbling man, an observer might assume he was clumsy. However, if the observer recognized that the man was dressed in a wig and make-up, and was located in a circus tent, they would likely assume that the man was in fact a clown, and that his tumbling was intentional. This validates the importance of context in describing competence. Lum further argues that whether the clown is competent – whether he is entertaining – is ultimately determined by the crowd. Although the clown must have reasonable confidence in his skills to assume the role, and the circus manager is likely to consider the clown competent based on work history or a brief audition, it is the crowd's response which confirms the clown's competence in entertaining. So although the performer's disposition is important in defining competence, competence must also be considered from the perspectives of those affected by the performance (Lum, 2004). While important for the profession to retain self-regulation and autonomy, evaluation of competent occupational therapy practice must consider the expectations of service users and other stakeholders in the health care service (Ryan, Esdaile, & Brown, 2003).

1.2 Competency Standards and their Applications

"When the major roles or domains within a profession are combined with the attributes underlying their performance, standards or levels of performance can be developed. The result is a set of competency-based standards for the profession."

(Hager & Gonczi, 1991, p.28)

Competency standards are regarded as authoritative documents (Standards Australia, 2005) which describe not only the required skills but also the knowledge and attitudes which are considered critical to practice at an acceptable level (Greiner & Knebel, 2003; McAllister, 2006). Competency standards typically describe the conduct expected of a specific discipline (Chambers, 1994) but have also been developed to address multidisciplinary practice and specialty areas of practice (Braithwaite & Travaglia, 2005). The main purpose of competency standards is to provide individual practitioners with a means to evaluate their performance. Other applications include the maintaining and enhancing of professional standards, guiding the design of education and training programs, screening internationally trained workers, and creating job descriptions (Abreu et al., 1998; Hager & Gonczi, 1991).

Although responsibility for authorship of competency standards typically rests with the professional or accrediting organization (Braithwaite & Travaglia, 2005) and regulatory bodies (Gossman, 1998), there is an expectation that the standards will embody the shared perceptions of competent performance held by diverse members of the profession (Standards Australia, 2005). Occupational therapy is notoriously broad and multi-faceted; for such professions it is recommended that wide stakeholder perspectives are solicited to "allow sufficient representation to provide both content expertise and constituent representation" (Chambers, 1994, p.362) in the development of competency standards. It is expected that competency documents will be regularly reviewed, revised or even withdrawn (Standards Australia, 2005). Considering the dynamic and rapidly changing environment of health care services, this is particularly relevant to the health professions (Australian Health Ministers, 2004). While one article was identified that recommended that competency documents should be reviewed at least every 7 to 10 years to prioritise key contemporary issues (Dunn & Cada, 1998), there exists no stipulation for review procedures. It should be noted that a review does not necessarily require a drastic revision of practice (Cusick, 2001); only minor adjustments may be required to accommodate contemporary service requirements.

There are a number of models for formatting competency standards but within Australia, the National Training Board (NTB) has recommended that professions adopt the Australian Qualifications Framework. Although not mandatory, this framework is expected to be consistently applied in industry competency standards, to promote transparency of service and provide national consistency across industries (ALIA, 2007). Within the Australian Qualifications Framework, competencies are presented as standards - "a statement in outcome terms of what is expected of an individual performing a particular occupational role" (ALIA, 2007, p.2). Each standard is typically comprised of a *Unit* (broad outline of area of professional activity), *Elements* (specific activities within that unit), *Performance Criteria* (descriptors to qualify the level of acceptable performance), and optional *Cues* (examples of practical considerations and contextual features which impact on competent performance) (ALIA, 2007).

When considering competency standard documents, language choice warrants attention. In interests of thoroughness, transparency and perspicuity, Chambers (1994) recommended that statements of competency should include as a minimum: a verb (the most significant performance of the competency); direct object (e.g. the client, the impairment, the task/role, etc.), and qualifying conditions (to provide further description/specificity). Chambers also cautioned against language that is too prescriptive, at risk of segregation and promoting 'partial competency' rather than an integrated, synthesized performance. Word selection is also important in view of the earlier discussion on the complex nature of competence. Depending on a profession's scope and susceptibility to contextual variation, word choice must be calculated, to accommodate versatility in practice whilst avoiding misinterpretation (McAllister, 2006). Frequently used

descriptors to summarise competencies are 'knowledge, skills, and values or attitudes' (e.g. Bossers et al., 2002; Dall'alba & Sandberg, 1996; WHO, 2005).

There is a contingent of academics strongly opposed to the use of competency-based standards to measure professional performance. An obvious criticism is the controversy and ambiguity surrounding the meaning of competence. Furthermore, critical reflection is not only fundamental to the quality of a professional's work performance, but also integral to individual growth and practice development. Considering that the meta-cognitions and moral virtues which characterise professional practice can only be inferred from action and defy objective measure, there is concern that an explicit listing of competencies distorts the complexities and multi-faceted, integrated nature of professional practice (Clanchy & Ballard, 1995), and fails to acknowledge the dynamic and evolutionary nature of professional knowledge (Hager, 2004; Lum, 1999). Critics further argue that to presume a de-contextualised 'check list' can effectively describe professional practice adopts a reductionist and technicist perspective of professional behaviour (Beckett, 2004; Hyland, 1997). Despite these objections, realistically it seems that within contemporary Australian society, expectations of professional performance will continue to be presented in the format of competency-based standards for some time.

To promote a versatile, productive, and internationally competitive workforce, the Australian Commonwealth Government recommended that national industries adopt competency standards and established the National Training Board (NTB) in 1990 to supervise this venture. Subsequently, the national occupational therapy professional body, The Australian Association of Occupational Therapists (OT AUSTRALIA), supported by the National Office of Overseas Skills Recognition (NOOSR), endeavoured to produce a set of competency standards applicable to locally and internationally trained OTs practising in Australia. Extensive consultation with professional stakeholders occurred on a national scale to develop standards which described "the skills, knowledge and attributes the profession believes are required for adequate practice in entry-level occupational therapists" (OT AUSTRALIA, 1994, p.2). The *Australian Competency Standards for Entry-Level Occupational Therapists* © (OT AUSTRALIA, 1994) defines competency as a concept both abstract and tangible, "a complex interaction and integration of knowledge, judgment, higher-order reasoning, personal qualities, skill, values and beliefs" (p.2) common to all occupational therapists despite the heterogeneity of practice environments and clients. Entry-level was defined as the first 2 years of practice. The document was intended to embody the standards of the profession at the time but also into the near future, and recognised that in order to retain its currency it must exist as "a working document which will be periodically reviewed and revised" (p.2). Applications for the standards included: screening internationally trained OTs, designing work re-entry programs, guiding development of curriculum in undergraduate programs; developing higher level competencies, conducting workplace performance appraisal, identifying registration requirements and developing job descriptions (OT AUSTRALIA, 1994).

Although professional competency standards have a significant influence in curriculum design, each Australian university is largely responsible for developing its own curriculum, which makes establishing consistent national criteria for educational performance difficult (Bossers et al., 2002). National professional associations commonly use competency documents when assessing and accrediting university programs. Indeed, OT AUSTRALIA uses the *Australian Competency Standards for Entry-Level Occupational Therapists* © (OT AUSTRALIA, 1994) to accredit the undergraduate courses at each of the 13 national undergraduate OT programs every five years, to promote national parity and high professional standards. (This accreditation process is currently under review). "Competency statements can form the bridge between education and practice" (Walsh, 2002, p.4). While competency standards should not necessarily dictate the content and methods of curriculum design and assessment, they certainly provide a valuable guide to educators in determining what competencies are expected of their graduates (Lum, 2004).

The education of health professionals is expected to offer those experiences considered crucial in preparation for beginning to practice (Dall'alba & Sandberg, 1996). For the profession of occupational therapy, certainly a key objective of entry-level education is to produce competent generalists (Missiuna, Polatajko, & Ernest-

Conibear, 1992) who can demonstrate competence when working with diverse client groups, in diverse practice settings (Tryssenaar & Perkins, 2001; Whiteford & Wright St-Clair, 2002). Since the intent of vocational preparation is to provide professionals with the necessary foundation knowledge and skills for competent practice (Chambers & Glassman, 1997), it seems logical to reference established standards of competency during curriculum design. "Assessment for fitness for purpose ensures that graduates possess relevant knowledge and skills and therefore ability to practice" (McAllister, 2006, p.6). Benefits of designing curriculum based on competency standards include: preparing generalist graduates who can be responsive to the needs of the future, promoting critical thinking and problem solving skills, preparing graduates for life-long learning, fostering a strong contextual focus, and focusing on outcomes and evidence-based practice (Walsh, 2002).

There are concerns regarding the extent to which competency standards influence the design of educational programs. While considered possible to groom graduates to the standards established by the profession, it must be recognized that these standards/expectations may be overshadowed in practice by contingencies including clients' needs, legislative requirements, organizational settings and priorities, budget restraints and resource availability (Berg, Atkins, & Tierney, 1997). Furthermore, critical thinking and clinical reasoning are the fundamental abilities which enable OTs to provide efficacious services regardless of context or problem complexity, and pursue professional development (Mitcham, 2003). These cognitive and attitudinal attributes elude definitive listing in competency standards documents, and therefore risk being neglected in a competency-based curriculum (Lum, 1999). Other authors argue that basing education on a 'checklist' of skills deemed necessary for the contemporary practice climate is too narrow, ignores the dynamic and complicated nature professional practice, fails to prepare graduates adequately for the future, and emphasises those skills considered to return the greatest economic profit (Barnett, Parry, & Coate, 2001; see review in McAllister, 2006; Ryan et al., 2003). However, the limited evidence available on the competency-based approach to education does suggest improved performance, at least, in educational assessments (Greiner & Knebel, 2003). Despite the continuing academic argument over its merits, competency-based education is likely to remain a fixture of professional preparation programs in Australian society. Considering the current national climate of accountability and outcomes-focus, which will be detailed later in this section, this may in fact be advantageous.

1.3 The Education of Health Professionals In Australia

"Professional-entry tertiary education serves several key goals: the general goal of higher education to develop independent learning, thinking, and problem-solving skills, the professional socialization of students into their designated professions, the acquisition of knowledge and skills that are discipline-specific, and the acquisition of life skills within the context of social responsibility."

(Higgs & Hunt, 1999, p.230)

As illustrated by the earlier discussion, the literature on professional competence recognises that skilled performance ensues from the integration of relevant knowledge, skills and attitudes. This understanding of skilled performance has strongly influenced the practical components of health professional programs in Australia (Greiner & Knebel, 2003). The onus placed on educators of health professionals is considerable. It is not just technical proficiency which needs to be taught, but also established 'habits of mind' (Esdaile & Roth, 2000) which will sustain professional practice and promote further development.

It is unethical and potentially dangerous to assume that learning for professional practice ends upon presentation of the degree (Hager, 2004). Lifelong learning is now considered integral to competence to practice (Alsop, 2003; Higgs & Hunt, 1999). Alsop (2001) suggested that much of a professional's knowledge at qualification could be considered out of date within five years. This phenomenon of knowledge obsolescence in the health professions requires graduates to possess a sense of personal integrity and commitment to critical reflection and self-evaluation of practice to maintain competence (Barnett et al., 2001; Dall'alba & Sandberg, 1996; Esdaile & Roth, 2000; Higgs & Hunt, 1999; Higgs & Titchen, 2001; Scaffa & Wooster, 2004). This includes attending to issues and trends beyond their own discipline but applicable to health care services, including interdisciplinary collaboration, quality improvement, consumer advocacy, best or evidence-based practice, and legislative development (Greiner & Knebel, 2003; Jirikowic et al., 2001; Madill & Holllis, 2003; Walsh, 2002). Considering that multiple professions practice within the same settings and share common values and client goals, there is now considerable potential for role overlap which has led to support for a collaborative approach to health care services (Ryan et al., 2003), and increased calls for inter-professional education (Braithwaite & Travaglia, 2005; Brown, Farnworth, Allen, & Kirke, 2006; Paul & Peterson, 2002; Smith & Pilling, 2007). Several documents describing cross-disciplinary competencies for the health professions have been developed (see examples in Tables 2, 3 & 4). The creation of these competencies indicates that although each profession provides a unique service, to operate effectively in health care settings they must share some competencies. Multi-disciplinary competencies tend to promote social responsibility, accountability to recipients of service, competence within one's discipline, and flexibility and adaptability in practice.

Table 2: The UK Health Professions Council Six Outcomes of Professional Competence for Allied Health Practitioners
1) Understand, work within, and respond appropriately to the limits of professional practice.
2) Demonstrate effectiveness in practice.
3) Practise within your profession's moral and ethical framework.
4) Think critically about personal practice and its context.
5) Deal appropriately with the new and non-routine.
6) Communicate and collaborate effectively.

(in Cross, Liles, Conduit, & Price, 2004)

Table 3: Seven Principles for the Australian Health Care Workforce of the 21st Century
Population and health consumer focused
Sustainable
Achieve equitable health outcomes
Suitably trained and competent
Flexible and integrated
Employable
Valued

(Australian Health Ministers, 2004)

Table 4: The Pew Health Professions Commission (1998) 21 Competencies for the 21st Century	
1.	Embrace a personal ethic of social responsibility and service
2.	Exhibit ethical behaviour in all professional activities
3.	Provide evidence-based, clinically competent care
4.	Incorporate the multiple determinants of health in clinical care
5.	Apply knowledge of the new sciences.
6.	Demonstrate critical thinking, reflection, and problem-solving skills.
7.	Understand the role of primary care.
8.	Rigorously practice preventive health care
9.	Integrate population-based care and services into practice.
10.	Improve access to health care for those with unmet health needs
11.	Practice relationship-centred care with individuals and families.
12.	Provide culturally sensitive care to a diverse society.
13.	Partner with communities in health care decisions.
14.	Use communication and information technology effectively and appropriately.
15.	Work in interdisciplinary teams.
16.	Ensure care that balances individual, professional, system and societal needs.
17.	Practice leadership.
18.	Take responsibility for quality of care and health outcomes at all levels.
19.	Contribute to continuous improvement of the health care system.
20.	Advocate for public policy that promotes and protects the health of the public.
21.	Continue to learn and help others to learn.

(The Pew Health Professions Commission, 1998)

It is not realistic to expect that universities can provide all graduates with identical learning experiences, that graduates can be prepared for every potential work environment and situation they will ever encounter or every professional skill they will ever require. The purpose of entry-level courses is not to produce, factory-style, ready-made practitioners suitable for instant insertion into independent professional practice. Rather, it is to provide graduates with the rudimentary skills, fundamental knowledge and attitudes so that they may enter the workforce and operate with some measure of independence, while continuing to develop in order to remain competent. Entry-level preparation is a platform from which graduate OTs can begin to practise competently, and then further enhance their skills by capitalising on workplace experiences and other opportunities for professional development. It is not reasonable to expect competency standards for entry-level practitioners to be exhaustive but they should represent the crux of what is necessary for competent practice in the health service of the 21st Century (Greiner & Knebel, 2003).

The expectation of graduates, and their future clients, colleagues and employers, is that entry-level education should provide adequate preparation to facilitate effective practice, regardless of the setting of the first position (Clouder & Dalley, 2002; Hager, 2004). Educators of health professional are burdened with the responsibility of producing graduates who are employable or useful in a variety of settings and contexts. It is assumed that de-contextualised practice – the essence of professional competence – can be taught and will translate across different practice areas (Clouder & Dalley, 2002). Walsh (2002) listed the following important requirements for modern graduates: competence in multiple settings, an ability to anticipate and cope with inevitable change in practice, commitment to life-long learning and self-improvement, an awareness of community needs and social milieu, and a desire for best practice. There is now general agreement amongst educators that learning appropriate professional behaviours is at least as important to becoming a competent practitioner as the learning of clinical skills (Smith Randolph, 2003).

1.4 The Face of Australia in 2007: A Summary of Key Changes since 1994 Influencing the Current State of Occupational Therapy Practice

To produce an exhaustive, comprehensive list of the changes which have occurred since the initial inception of the *Australian Competency Standards for Entry-Level Occupational Therapists* © (OT AUSTRALIA) in 1994 is a task of magnitude beyond the scope of this review. The following discussion identifies the key trends which have influenced the development of occupational therapy practice in Australia, and the subsequent competencies required for contemporary practice.

The momentum of change which has dominated the early 21st Century can largely be attributed to the phenomenon of globalisation (Cusick, 1999). Communication and information technology is not only becoming increasingly sophisticated, but also increasingly accessible and more readily available (Greiner & Knebel, 2003; Kanny & Anson, 1998; Ryan et al., 2003). Basic technological literacy is a survival skill for the modern era (Hammel & Angelo, 1996). In response to the pressures posed by the competitive global market, industries (including health and social care services), endeavour to meet consumer demand by the most economic and efficient means. Modern business management is significantly influenced by a commitment to quality assurance. Services are driven by cost-containment, are highly regulated and expected to justify their methods and allocation of resources (Deen, Gibson, & Strong, 2002; Paul & Peterson, 2002). Within the health care environment, there is an increased expectation of effective, efficient, appropriate and timely services (Craik & Rappolt, 2003; McPherson et al., 2005). Health care services operate within an increasingly litigious society and therefore must be transparent and withstand public scrutiny (Roberts, 2005). The consumer is a powerful driver of the current social order.

Contemporary health care services have been influenced not only by economic rationalisation but also shifts in social values (Millsteed, 1999) - much of modern health care delivery is underpinned by principles of social justice and individual rights. This global ethos was enshrined by the World Health Organisation's (WHO) *International Classification of Functioning, Disability and Health* (ICF) (2001).

A new approach to health care delivery was advocated. The functional consequences of diseases and disorders and how these could be minimized became the focus for intervention (Hocking, 2003), rather than the traditional focus on pathology or the source of impairment. Health care providers were encouraged to support and facilitate the individual's participation in valued activities or occupations. Health and social care services were expected to operate at a high caliber, committed not only to treating illness but also preventing illness and promoting health at a population level. The ICF also endorsed equitable access to health, and encouraged a partnership approach and collaboration between health care providers and their clients.

Thus on the international stage, the health care system has been revolutionised by economic pressures, constantly evolving diagnostic and treatment methods, and increased public expectations (Madill & Holllis, 2003). Similarly, Australian health and social care services have been significantly reformed (Australian Health Ministers, 2004). Demands for economic rationalism, increased public accountability, changes to

Medicare funding, and shorter lengths of stay in hospital have all contributed to the transition from the traditional approach of episodic treatment in institutional settings to holistic, community-based care services (Deen et al., 2002; Kornblau, 2001; Touger-Decker, 1998). The medical expert model which dominated treatment in the 20th Century has been replaced by the partnership or client-centredness approach to health care (McNair, 2005). With significant advances in medical technology, and an increasingly informed and empowered public, there is now greater expectation for high quality health services. Health and social services are expected to accommodate public need. Individual values and goals must be considered in clinical reasoning and decision-making. Individual clients (no longer passive 'patients') are encouraged and expected to actively participate and collaborate with their health care providers in planning interventions (Wilby, 2005). Treatment is regularly provided by multiple health disciplines, which has led to an emphasis on providers adopting a coordinated, team approach to their practice (Australian Health Ministers, 2004). In light of the pressures of public scrutiny, cost-containment and outcomes-focus on the health care system, the team approach is not just considered beneficial but essential (Paul & Peterson, 2002).

Evidence-based practice is another hallmark of the modern health care system – practitioners must have evidence to justify their clinical reasoning and decisions (Abreu et al., 1998; Bennett & Bennett, 2000; Lovelock, 2005). Individual practitioners are expected not only to coordinate their treatment with the fellow members of their health care team, but must also demonstrate greater self-regulation, autonomy and resource efficiency (Roberts, 2005; Westcott & Clouston, 2005), necessitating basic management skills (Adamson, Cant, & Atyeo, 2001; Boyt Schell & Yarett Slater, 1998). Thus at entry to profession, practitioners are expected to treat more patients, with fewer resources, whilst maintaining quality of care (Foto, 1997). Australian health professionals are answerable to multiple stakeholders: the consumer, colleagues, the employer, the profession, and their own personal sense of integrity (Brockett, 1996).

Demographics of the Australian population have also changed significantly since 1994. Improvements in quality of life and medical diagnostic procedures and treatments have decreased mortality rates. Subsequently, the Australian population is living longer, but with more chronic and increasingly complex illnesses (Brooks, 2003; Bruhn, 1991; Paul & Peterson, 2002; Tickle-Degnen, 1998; Yarmo-Roberts, 2007). Our increasingly multicultural population contains multiple and varying perspectives on meanings of health and expectations of service providers, which further complicates health care delivery (Ryan et al., 2003). National priority areas for the health services include health promotion, chronic disease management, cancer, mental health, obesity, and special populations including remote and rural areas and indigenous Australians (Fortune, Farnworth, & McKinstry, 2006). This has led to an increased need and demand for health professionals. Despite the 20.4% increase in allied and complementary health professional workers from 1996 to 2001, staff shortages are common (Australian Health Ministers, 2004).

The higher education sector has also been transformed by the demand for accountability, with a new focus on outcome measures and cost-containment (Braithwaite & Travaglia, 2005; Cohn & Crist, 1995; Harris, Adamson, & Hunt, 1998). This change was enshrined in the Higher Education Commission's (HEC) report *Achieving Quality* (1992). In response to the increasing mobility of workers and demands for quality services, the HEC declared that to receive funding in future, universities must demonstrate that their graduates possess generic competencies, in addition to discipline-specific skills, which could be generalised across multiple work settings (Clanchy & Ballard, 1995; Harris et al., 1998; Powell & Case-Smith, 2003). The increasing sophistication of technology (Gallew, 2004; Hollis & Madill, 2006) and shifting demographics have also diversified the characteristics of the student population, in terms of their age, educational and vocational background, culture and life roles (Allen, Strong, & Polatajko, 2001; Funk, 2004; Kehrhahn, 2002; Shanahan, 2000). Subsequently adult learning theories and innovative methods of instruction have been incorporated into academic curricula (Hollis & Madill, 2006; Rodger & Brown, 2000; Ryan et al., 2003) to better accommodate the attributes of the student population.

This amalgamation of change has influenced not only the characteristics of incoming practitioners and current work environments, but has also impacted the development of the occupational therapy profession. The WHO's ICF definition of health lent further weight to the argument purported by key occupational

therapy theorists who urged a return to occupation as the focus of our intervention (Bruyere & Van Looy, 2005; Hocking, 2003; McLaughlin Gray, 2001; Thomas, Penman, & Williamson, 2005). By defining service outcomes with respect to an individual's participation in occupations, many opportunities emerged to further expand and develop occupational therapy services. "No other profession has a longer history of promoting wellness through education and advocacy of lifestyles that provide the activity, nutrition, rest, challenge, and personal fulfillment healthy persons need" (Christiansen, 1996, p.411). Practice areas and roles now include community-based, consultative, educational advocacy, health promotion, planning positions, case management, private practice, and medico-legal assessments (Coulthard, 2002; Thomas et al., 2005). There is international acceptance that client-centredness, occupation-based practice, accountability and measurement of therapy outcomes are fundamental to contemporary occupational therapy (Law, 2004; Lee & McKenzie, 2003). As a profession founded on empiricism (Clark et al., 1991), occupational therapy has been challenged by the increasing emphasis on evidence-based practice (EBP). As Bennett and authors (2003) highlighted, the sheer volume of literature devoted to EBP in occupational therapy journals and publications testifies to its importance to the future survival of occupational therapy. EBP also carries the expectation of continuing professional development, so that OTs remain competent (Abreu et al., 1998; Bennett & Bennett, 2000; Lovelock, 2005; Ryan et al., 2003).

To cope with the increased demand for occupational therapy services in Australia, more positions have been made available in entry level profession courses and graduate-entry programs have been introduced (Allen et al., 2001). The apprenticeship model of learning and technical-rational approach to the education of practitioners of the 1990s has been replaced with an emphasis on experiential learning and clinical reasoning, indicative of the shifting perceptions of what constitutes effective practice. (Brasic Royeen, 2001; Cusick, 1999; Funk, 2004; Walsh, 2002; Westcott & Rugg, 2001). Service provision models and bodies of practice knowledge have adapted in response to demographic shifts and political, economic, social and technological demands (Ryan et al., 2003; Whiteford & Wright St-Clair, 2002). Concepts such as occupational science, client-centredness, occupation-based practice, and reflective practice have been influential (Lee & McKenzie, 2003).

Adaptability and flexibility are critical for the survival of health professions in the 21st Century. "Contexts and environments in which health and social care are delivered change to reflect new professional, political, environmental, sociological and technological influences, and each health practitioner must adjust practice accordingly" (Alsop, 2003, p.261). The current momentum of change in health and social services is likely to continue (Ryan et al., 2003). Incoming occupational therapy students must acknowledge that they are committing to a profession demanding lifelong learning, requiring regular review of his/her own aptitude, and adapting to accommodate changing job requirements and technologies. Contemporary and future generations of OT require more than just proficient clinical skills but also strategies to deal with complex responsibilities (Adamson, Lincoln, & Cant, 2000).

"The nature of competence…is not just an attribute of individuals, but a characteristic of professionalism that acknowledges change as the norm, and that leads ultimately to personal, professional, organization and societal growth" (Alsop, 2001, p.128). It is important when reviewing the *Australian Competency Standards for Entry Level Occupational Therapists* (OT AUSTRALIA, 1994) that the core principles and functions of the profession are preserved and enshrined within the document, whilst providing sufficient flexibility to accommodate contextual variety and permit expansion of services. Competent performance must embody our professional identity, regarded as a consistent approach and ethos which underpins occupational therapy services regardless of context and inevitable change in the future. "Professional competence is now…more about the right processes that enable the practitioner to reflect on uncertain situations and use knowledge as a foundation for problem solving" (Cusick, 1999, p.72).

SECTION 2: Comparison of Australian OT Competencies with Standards of Australian Health Services and International Standards of Occupational Therapy

Disclaimer
Please note that the following analyses of competency standards are based on explicit statements contained within the documents, or reasonable interpretation of what is written. While this review was intended to be thorough, comments where concepts/competencies are described as either absent or insufficiently emphasised should be interpreted with caution. While the institution/discipline/country may not have given equitable attention or emphasis to the concept/competency in its standards, it should not be presumed that the institution/ discipline/country does not endorse this concept/competency.

2.1 The Australian Scene

2.1.1 University Generic Graduate Attributes

Anticipating that the future workforce would need to contend with the demands of a dynamic work environment highly susceptible to change and adaptation, the Industrial Research and Development Advisory Committee of the European Communities on Skills Shortages in Europe proposed in 1990 that higher educational institutions should instill skills and abilities in its graduates beyond those specific to their disciplinary field (Harris et al., 1998). This recommendation was heeded in Australia, as demonstrated by HEC's publication of *Achieving Quality* (1992). Universities would be required to produce graduates possessing a prescribed set of generic attributes (Barrie, 2004, 2006) to answer the public demand for effectiveness and efficiency.

By specifying generic graduate attributes, in effect a university issues an assurance that its product, professional graduates, will provide a valuable contribution to the workforce (Barrie, 2004; Beckett, 2004). Within the Australian context, generic graduate attributes tend to emphasise the principles of social responsibility and justice (Barrie, 2004). These attributes are considered beneficial across a range of contexts, and range from moral and ethical virtues to simple technical skills (Barrie, 2006; McAllister, 2006). The introduction of graduate attributes was intended to inspire curriculum reform, and to enhance the competencies of practicing professionals (Clanchy & Ballard, 1995).

Responsibility for incorporating graduate attributes into discipline-specific curricula fell to the university educators (Barrie, 2006). Although all Australian universities have complied and developed their own set of generic graduate attributes, inconsistencies in format (Barrie, 2004), sheer variety and the "hodge-podge of general desiderata with low-level technical competencies…lumped indiscriminately together with higher order intellectual skills" (Clanchy & Ballard, 1995, p.157) would suggest that the concept of generic graduate attributes is not really well understood (Barrie, 2006; Clanchy & Ballard, 1995).

Therefore occupational therapy educators at Australian universities must now incorporate generic graduate attributes as well as discipline-specific competencies in their curriculum. The variation in generic graduate attributes between universities poses a potential threat to the entry level standards of nationally trained occupational therapists. It must be determined whether the heterogeneous design of curricula will compromise the consistency, quality and expectations of skills in the future generations of our occupational therapists.

The graduate attributes from each of the 13 Australian universities with an occupational therapy school were downloaded from each university website and compared. There was considerable variation in the number of attributes (ranging from 3 – 12). Some universities have defined their graduate attributes in broad, over-arching terms that encompass more specific components (e.g. University of Sydney and Newcastle University), whereas others have opted to identify a larger list of attributes which are more circumscriptive (e.g. James Cook University and Deakin University). Despite these differences, 17 common themes were identified. The 13 universities have been compared in terms of their attention to these themes (see Appendix 1). Four themes were common to all 13 universities and are presented in Table 5: effective communication skills, an attitude of enquiry and research, critical thought and analysis, and values-driven practice. Of the 17 themes, 12 were present in more than 50% of the universities. Attributes relating to moral attitudes and ethical virtues were most prominent, while attributes relating to technical skills, such as numeracy and literacy, were least common.

Table 5: Consistent Themes in Generic Graduate Attributes from the 13 Australian Universities with an Occupational Therapy School
Effective communication skills
Displays attitude of enquiry & research
Demonstrates critical thought & analysis
Values-driven practice

Based on this analysis, the graduate attributes of each of the 13 universities do not appear to be contradictory to any of the competencies for the profession of occupational therapy. Yet as the *Australian Competency Standards for Entry-Level Occupational Therapists* © (OT AUSTRALIA, 1994) is also used to screen internationally trained OTs, it may be useful to explicitly state these attributes in revised competency standards.

2.1.2 Competencies for Inter-Professional Practice

To facilitate inter-professional practice in Australian health services, health practitioners must have some consistency in their approach. Accordingly, competency standards pertaining to multiple disciplines working within specific practice areas have been developed. These practice areas include palliative care (2005), chronic disease management (2007) and community-based rehabilitation (2006). All of these inter-disciplinary competency standards are non-mandatory, intended to provide guidance for coordinated services and "reflect, as far as possible, the level of care that the Australian community would expect" (Palliative Care Australia, 2005, p.8). The creation of these documents is reflective of the responsibility of health care services to respond and evolve according to identified community needs, so that the necessary systems and resources are available and effective.

These competency standards are relevant to all health professionals who may practice within a particular specialty area. Considering that each discipline may engage with the consumer at different stages in the continuum of care, and in a variety of locations and circumstances, the documents cannot afford to be too specific or technical. Instead, the competencies embody desirable attitudes and work practices that facilitate high quality care for consumers. For example, 'Service Continuity' and 'Consumer Engagement' are competencies identified for community-based rehabilitation services, and 'Holistic Practice' and 'Partnership and Participation' are competencies specified for practitioners working in chronic disease management. This indicates that when the range of services and technical skills within a practice area becomes relatively broad and diverse, it is neither reasonable nor practical to expect all practitioners to be competent in skills that are not related specifically to their own professional discipline and role. These documents highlight the importance of identifying the methods for approaching practice, the shared principles and values that underpin professional performance, within statements of competency.

2.1.3 Competencies for Cognate Allied Health Disciplines

The cognate allied health professions of audiology, physiotherapy and speech pathology were selected for comparison with occupational therapy. There are currently no official competency-based standards for audiologists in Australia and therefore audiology has been excluded from further analysis. Although the *Australian Standards for Physiotherapy* © (Australian Physiotherapy Council, 2007) are not officially called 'competencies', this document is similar in intent to the competency-based standards of occupational therapy and speech pathology, it has been considered appropriate for inclusion in this analysis. Headings from the competency standards for occupational therapy, physiotherapy and speech pathology have been compared in Table 6.

A symbol-coding scheme has been used to identify the standard headings from each document that contain similar concept/s. Grey shading indicates that there is no standard within that document which similarly addresses the concept/s included by the other disciplines. Standards were noted to differ in their level of specificity: some were more over-arching than others, and in fact embodied concepts contained in several standards from the other documents. Accordingly, if a cell contains a symbol but no words, this indicates that the standard listed directly above it is over-arching and encompasses the concept/s identified by the standards from other documents presented in the cells to the left and or right. If the standard heading has been written in italics, this indicates that while addressing the concept/s identified in the standards from the other documents, the standard written in italics does not give equivalent weight or attention to the concept/s.

While not stated explicitly, the standards of speech pathology and physiotherapy appear to follow the Australian Qualifications Framework, as recommended by the NTB. As noted in Section 1, adopting comparable formats promotes national consistency and facilitates communication between the different disciplines. It is not reasonable to expect different disciplines to share identical competencies for practical tasks, as established in section 2.1.2. So when comparing the occupational therapy standards to standards from the cognate allied health disciplines, the focus must be on those competencies considered important for a health professional practicing in Australia.

Both speech pathology and physiotherapy have designated a separate section, distinct from the listing of competency standards, which provides a useful explanation of the scope and range of services that the public can expect. There is no equivalent provision or attention to specialist areas and settings in the occupational therapy competency standards document. The physiotherapy standards also identify key contemporary issues of practice, such as the client-centred approach and cultural competence. All three disciplines acknowledge that standards of competency require regular review to maintain their currency. Although not specifying a regular review cycle, both speech pathology and physiotherapy have revised their standards since their initial inception (on what can be inferred to be a 7 year cycle). The competencies for occupational therapy have not officially been reviewed since their initial introduction 13 years ago.

Table 6: Comparing Competency Standards of Australian Cognate Allied Health Disciplines

Speech Pathology (2001)	**Physiotherapy (2007)**	**Occupational Therapy (1994)**
Assessment ■	Assess the client ■	Assessment & Interpretation of Occupations, Roles, Performance & Functional Level of Individuals and Groups ■
Analysis & Interpretation ▼	Interpret and analyse the assessment findings ▼	▼
Planning of Speech Pathology Intervention ●	Develop a physiotherapy intervention plan ●	●
Speech Pathology Intervention ♠	Implement safe and effective physiotherapy intervention(s) ♠	Implementation of Individual and Group Interventions ♠
♦	*Communicate effectively* ♦	Documentation & Dissemination of Professional Information ♦
Planning, Maintaining, and Delivering Speech Pathology Services □	Evaluate the effectiveness and efficiency of physiotherapy intervention(s) □	Evaluation of Occupational Therapy Programmes □
Planning, Maintaining, and Delivering Speech Pathology Services ✯	*Access, interpret and apply information to continuously improve practice* ✯	Management of Occupational Therapy Practice ✯
Professional Development ☿	Demonstrate professional behaviour appropriate to physiotherapy ☿	Professional Attitudes & Behaviour ☿
❖	Access, interpret and apply information to continuously improve practice ❖	❖
	Communicate effectively ☒	☒
Professional, Group and Community Education ◎		Professional Education ◎
Range Indicator Statement ⍁	Operate effectively across a range of settings ⍁	

Of the three professions, occupational therapy is unique in defining entry-level competence as the first two years of practice. This implies that a higher level of performance is expected from OTs after they have completed their first two years of practice. Interestingly, despite the discussion in Section 1 regarding the debate surrounding definitions of competence, and all professions recognizing that skills of an entry-level practitioner differ from those of a more experienced one, the document for OTs is the only one to provide a definition for competence.

Key concepts and terminology explicitly identified in the three documents have been listed and compared in Table 7. Several terms which could be regarded as integral to contemporary Australian health services have been incorporated into the physiotherapy and speech pathology documents but are missing from the occupational therapy standards. Considering the degree to which information and communication technologies impact upon the delivery and management of contemporary health services, the absence of this term from the occupational therapy competencies is particularly conspicuous.

Table 7: Comparing Terminology & Concepts Included in Cognate Allied Health Competency Standards

Key Terms and Concepts Explicitly Referenced or Defined	**Occupational Therapy**	**Speech Pathology**	**Physiotherapy**
Higher level competencies	✓	✓	✓
Field-specific competencies	✓	✓	✓
A definition of 'competence'	✓	✗	✗
Competence defined at entry to the profession	✗	✓	✓
Need to review competencies	✓	✓	✓
Review date specified	✗	✗	✗
Active client role	✓	✓	✓
Mutually agreed goals with client	✓	✓	✓
Mutually agreed goals with team	✗	✗	✗
Autonomy	✓	✗	✗
Multi-disciplinary	✓	✗	✗
Inter-professional	✗	✗	✓
Team approach	✗	✓	✓
Transition to continuing service	✗	✗	✓
Special populations	✗	✗	✓
Continuing professional development	Concept identified, however specific term absent	✓	✓
Research	✓	✓	✓
Computer literacy/ Information technology skills	✗	✓	✓
Management skills	✓	✓	✗
Accountability/ Measuring outcomes	Yes, but not with contemporary emphasis	✓	✓
Specific national workplace policies such as occupational health and safety, equal employment opportunities, and anti-discrimination	✗	✓	✓

Despite all three documents acknowledging and making reference to the team context for delivery of health care services, there appears to be stronger emphasis on collaborating with the client than collaborating with fellow health professionals. The current language suggests that professionals work in parallel to reach similar goals, rather than collaboratively plan team goals. Statements such as "interventions selected with consideration to assessment findings from other health providers" (Australian Physiotherapy Council, 2007, p.48), "input and advice of other team members and colleagues" (Speech Pathology Australia, 2001, p.8), and "information pertinent to client or programme outcomes is discussed with other staff" (OT AUSTRALIA, 1994, p.9) is used only sparingly in the documents, with no reference at all to mutually agreed team goals for intervention.

Active consumer participation is much more strongly enshrined in the standards for speech pathologists and physiotherapists than those for OTs. It is the frequency of reference to client involvement and perspective in those two documents which reinforces the partnership approach to practice. While certainly acknowledging the need to incorporate client perspective in clinical reasoning, the language of the *Australian Competency Standards for Entry-Level Occupational Therapists* © (OT AUSTRALIA, 1994) still resonates with the medical expert approach to practice. For example, compare "the client and/or significant other is **kept informed** about assessment findings and the subsequent intervention is negotiated, taking into account the

client's wishes" (p.8) to "priorities for assessment are set **in conjunction** with the client" (Speech Pathology Australia, 2001, p.8) and "The physiotherapist will **work in partnership** with the client in undertaking the assessment and … the holistic needs of the client will be considered" (Australian Physiotherapy Council, 2007, p.35).

2.2 The Occupational Therapy Profession

2.2.1 Global Standards for Occupational Therapy

The World Federation of Occupational Therapists (WFOT) is currently in the process of developing global competency standards for entry-level occupational therapists, with anticipated release in 2008. The *Revised Minimum Standards for the Education of Occupational Therapists* (WFOT, 2002) is the current international reference for the design of occupational therapy curricula, which encourages international consistency in standards of occupational therapy services (Rogers, 2005). While this document pertains to competencies for educational programmes rather than OTs, it is certainly influential in the development of occupational therapy in individual countries and therefore warrants consideration in regards to its influence on the *Australian Competency Standards for Entry-Level Occupational Therapists* © (OT AUSTRALIA, 1994).

The *Revised Minimum Standards for the Education of Occupational Therapists* (WFOT, 2002) has been revised on multiple occasions since its introduction in 1952, in response to changes in provision of health care services, and occupational therapy terminology and techniques. WFOT commented that with each revision, it became necessary to adopt a less prescriptive stance "to allow for more flexibility to allow for differences in local health and welfare needs" (p.3). There is emphasis on the need to review both curricula and national standards of practice "as the local health needs, occupations, services, legislation and student knowledge, skills and attitudes change over time" (p.8), which necessitates continuous open dialogue between practicing OTs and educators.

WFOT (2002) recommended that while curricula should aim to address national context and priorities to prepare OTs for local practice, it should also enshrine the core principles of occupational therapy to promote international consistency. Key terms and concepts specified by WFOT include life-long learning, the primacy of occupation as the focus of intervention, reflective practice, collaborative practice, evidence-based practice, and management skills. Professional competence is defined as the "knowledge about what your knowledge, skills and attitudes are and how current and acceptable they are" (p.19), and results from both entry-level preparation and clinical experiences.

WFOT identified five core competencies expected in graduates of occupational therapy programs, which have been compared against the competencies of the *Australian Competency Standards for Entry-Level Occupational Therapists* © (OT AUSTRALIA, 1994) in Table 8. Not surprisingly, the WFOT competencies are less specific and fewer in number than the Australian competencies. It is however interesting that a congruent competence for 'Professional Education' has not been explicitly identified by WFOT as a necessary part of international curricula (although it could be argued that this competence would be covered by the standard 'Professional Reasoning and Behaviour'). In the Australian context, speech pathology has produced a similar standard ('Professional, Group and Community Education') but physiotherapy has not.

Table 8: Comparison of Australian Competencies for Occupational Therapists against the WFOT Essential Competencies for Graduates of Occupational Therapy Programmes

Competency Standards for Australian OTs (1994)	**WFOT Essential Knowledge, Skills & Attitudes for Competent Practice (2002)**
Professional Attitudes and Behaviour ■	Professional reasoning and behaviour -meeting local & international expectations of qualified health care workers - research/information search process -ethical practice -professional competence -reflective practice -managing self, others and services ■
Management of Occupational Therapy Practice	The person-occupational-environment relationship and its relationship to health ⌀
	Therapeutic and professional relationships -establishing effective working relationships with recipients of occupational therapy and effective teamwork ⌀
⌀	The context of professional practice -aspects of the physical, attitudinal and social environment affecting people's health and participation, and affecting OT practice. -local factors and international factors ⌀
Professional Education ☒	
Assessment & Interpretation of Occupations, Roles, Performance & Functional Level of Individuals and Groups ★	An occupational therapy process -the process followed by OTs when working with recipient of OT. Nature of process will vary with context and purpose of intervention. It is what the OT does, and the sequence in which things are done
Implementation of Individual and Group Interventions ★	
Evaluation of Occupational Therapy Programmes ★	
Documentation and Dissemination of Professional Information ★	★

* Symbol-coding used to identify standards containing similar concepts/themes*

In Table 9 the four recurrent themes in Australian university generic graduate attributes are compared with the statements contained in the Australian occupational therapy standard 'Professional Attitudes and Behaviour' and the WFOT competency 'Professional Reasoning and Behaviour'. A statement pertaining to critical thought or reflective practice is notably absent from the occupational therapy standard. Prominent issues otherwise common to all three documents are ethical values, expectations of conduct, cognitive processes, and interpersonal relations.

Table 9: Identifying Similarities between the Recurrent Themes of Australian University Generic Graduate Attributes and Conversant Competency Standards Developed by Australian OTs and WFOT

Australian Occupational Therapy Competency Standard: Professional Attitudes and Behaviour (1994)	**WFOT Core Competency: Professional Reasoning and Behaviour (2002)**	**Consistent Themes from Australian University Generic Graduate Attributes**
1.1 Practices in an ethical and professional matter. ♉ 1.2 Understand the broad impact of political, legal and industrial issues on the profession, employing body and its client groups. ♣ 1.3 Assumes responsibility for own professional practice. ◎ 1.4 Respects the individuality and worth of each client within his/her environment. ♉ 1.5 Establishes and maintains collaborative working relations with other disciplines. ● 1.6 Communicates effectively with clients and / or significant others. ● 1.7 Demonstrates the ability to effectively handle emergency and/or threatening situations. 1.8 Expands own level of professional competence. ◎ 1.9 Contributes to the validation of occupational therapy practice through research as appropriate. ⌲ 1.10 Contributes to occupational therapy practice through support of OT AUSTRALIA. ◎ 1.11 Demonstrates preparedness to undertake advocacy roles on behalf of clients. ●	-ethical practice ♉ - meeting local & international expectations of qualified health care workers ♣ -managing self, others and services ● -reflective practice ⌘ -professional competence ◎ - research/information search process ⌲	-Values-driven practice ♉ -Effective communication skills ● -Demonstrates critical thought & analysis ⌘ -Displays attitude of enquiry & research ⌲

Similarly Themed Concepts
♉ = ethics/values
♣ = organizational/ legislative issues
◎ = competent performance
● = interpersonal relations
⌲ = research
⌘ = evaluation

2.2.2 International Competencies for Occupational Therapists

To ensure Australian occupational therapy competency standards are commensurate with international standards, it is important to examine the content and format of competencies developed by other national bodies. Standards have been collected from nine countries/organizations: Brazil, Singapore, Hong Kong, Sweden, Council of the Occupational Therapists in the European Communities (COTEC), USA, United Kingdom (UK), New Zealand (NZ) and Canada. The frameworks chosen to format the standards are inconsistent, and rarely justified. Brazil (2002) and Canada (2007) have adopted unique frameworks for their competencies, but seven documents can be categorized into two types of frameworks. Table 10 provides a comparison between competency standards from Hong Kong (1996), Singapore (1996) and Sweden (2003). We have assigned the term 'Technical-Prescriptive Framework' to describe the format of these three documents.

Table 10: Competency Standards Following a Technical-Prescriptive Framework

SINGAPORE (1996)	HONG KONG (1996)	SWEDEN (2003)
(1) Assessment	(3) Evaluation	- OT Assessment, objectives, documentation, evaluation & follow-up
(2) Treatment Planning	(4) Program Planning	
	(1) Screening	
	(2) Referral	
		Areas & functions of the profession
(6) Legal / Ethical Components	(10) Legal/Ethical Components	
(3) Implementation of Treatment Plan	(5) Program Implementation	- Medico-technical products – assistive devices
(4) Discharge Planning	(6) Discontinuation of Services	
(5) Quality Assurance	(7) Quality Assurance	- Resource Husbandry
		- *Planning & Management tasks*
		- Planning & Management tasks
	(9) Safety & Confidentiality	
		- Emergency Preparedness
	(8) Indirect Services	- Preventive, health-promoting & compensatory measures
		- Health promoting measures
		- Information, teaching and supervision
		- Equipment & environment
		- Research & Development

This 'Technical-Prescriptive Framework' distinguishes these sets of competencies from four other competency documents, which we have classified as following an 'Enabling Framework'. The competencies from USA (2005), UK (2007), NZ (2004) and Australia (1994) follow the 'Enabling Framework' and have been compared in Table 11.

A symbol-coding scheme has been used to identify the standard headings from each document that contain similar concept/s. Grey shading indicates that there is no standard within that document which similarly addresses the concept/s included by the other countries. Standards were noted to differ in their level of specificity: some were more over-arching than others, and in fact embodied concepts contained in several standards from the other documents. Accordingly, if a cell contains a symbol but no words, this indicates that the standard listed directly above it is over-arching and encompasses the concept/s identified by the standards presented in the cells to the left and or right. If the standard heading has been written in italics, this indicates that while addressing the concept/s identified in the standards from the other documents, the standard written in italics does not give equivalent weight or attention to the concept/s.

Table 11: Competency Standards Following an Enabling Framework

USA (2005)	UNITED KINGDOM (2007)	AUSTRALIA (1994)	NEW ZEALAND (2004)
(2) Screening, Evaluation, and Re-evaluation	(3) Assessment and Goal Setting	(2) Assessment & Interpretation of Occupations, Roles, Performance & Functional Level of Individuals & Groups	(1) Implementation of Occupational Therapy
	(1) Referral		
	(2) Consent		
		(4) Evaluation of Occupational Therapy Programmes	
(3) Intervention	(4) Intervention and Evaluation	(3) Implementation of Individual and Group Interventions	
(4) Outcomes	(5) Discharge, Closure, or Transfer of Care		
	(6) Record Keeping	(5) Documentation and Dissemination of Professional Information	
(1) Professional Standing and Responsibility	*(8) Professional Development / Lifelong Learning*	(1) Professional Attitudes and Behaviour	(3) Culturally Safe Practice
	(8) Professional Development / Lifelong Learning		(7) Continuing Professional Development
	(9) Practice Placements	(6) Professional Education	
		(7) Management of Occupational Therapy Practice	(6) Management of Environment & Resources
	(7) Service Quality and Governance		(5) Management of Self & People
	(11) Research Ethics		(2) Safe, Ethical, Legal Practice
	(10) Safe Working Practice		
(2) Screening, Evaluation, and Re-evaluation	*(2) Consent*		(4) Communication

The COTEC competencies (2006) competencies contain elements of both frameworks. The key point of distinction between these two frameworks is the degree of flexibility and variation in practice each can accommodate. The Technical-Prescriptive framework, as the rubric suggests, encourages a rather instructional and almost sequential description of what might be observed during an OT's work performance. This framework suggests that there are a finite number of approaches to practice. In contrast, the Enabling framework establishes a guide to practice, providing instruction for how to approach task performance, instead of how to perform specific tasks and roles. The less prescriptive stance of the Enabling framework is congruent with the earlier proposal that competent practice requires a synthesis of multiple performance components. The development of occupational therapy services within a country is mirrored by choice of framework: when the scope of practice is narrower, standards can afford to be more prescriptive but when the scope expands, a more facilitating approach is required. The specificity contained within competency standards adopting the Prescriptive-Technical framework implies that it is possible to exhaustively list all of

the requisite tasks of an OT. In contrast the Enabling framework, via labeling of standards and language choice, alludes to the complex relationship between client characteristics, practitioner and profession development, and practice settings which determines the level of performance considered competent.

We have identified several factors that appear to have contributed to the variance in how individual countries have approached the compilation of their competency standards:

Culture
Different cultural values appear to have strongly influenced the development of competency standards, which highlights the importance of context in defining competence. The Brazilian competencies (2002) emphasise social responsibilities and individual rights, e.g. "become able to act as a facilitator and an agent of social transformation of communities and social groups through an attitude of inclusiveness" (p.3). Competencies formatted according to the Technical-Prescriptive framework make reference to other ethical documents, but otherwise focus more on procedural elements of work performance, which is illustrative of cultural priorities and perspectives. For example, in Singapore and Hong Kong most occupational therapy services require a medical referral and intervention is based on the medical model of practice. Within the Western countries such as the United Kingdom, there is greater attention to managerial and efficiency requirements of practice, e.g. "provide a service of the highest quality and the best value for money" (College of Occupational Therapists, 2007, p.3).

National Priorities
Swedish health and social services are highly regarded for their responsiveness to individual needs. Accordingly, five of the 10 Swedish competency standards are devoted to products and services of intervention. COTEC standards are applicable to 25 countries so cannot afford to be too prescriptive at risk of cultural variations and discrepancies. The Canadian framework was chosen to provide national consistency, since it is common to other health professions in Canada, such as doctors. Australia similarly justifies its choice of framework on the basis of conforming to national expectations. This influence of national context emphasises that OTs are expected to be competent to meet the priorities of their local population.

Scope of Occupational Therapy Services
The choice of framework (i.e. either Technical-Prescriptive or Enabling) appears to reflect the scope of occupational therapy services in that country. Where practice is limited to specific settings (primarily the traditional hospital or medical institutions), such as in Hong Kong and Singapore, it is possible to adopt a more prescriptive approach and state explicitly the tasks and duties the OT is expected to perform. The Enabling framework has been adopted by countries where the scope of practice is much broader, with more diverse and consequently more complex skills required by OTs, including skills that may be unique to a specific practice area. In these countries, the competency standards reflect the generic foundation skills and abilities which underpin competent practice. Both the documents developed by Canada and COTEC provide a summary of the potential areas and functions of occupational therapy in the national/international context, to which the competencies are expected to apply. This feature is useful in highlighting the nature of occupational therapy practice within the national context.

Authorship
Brazil was the only document to be written by scholars and educators and specifically intended to guide curriculum development. The 34 statements of competence read similarly to course outcome statements. Regulatory boards were responsible for the development of the COTEC and NZ standards, which is reflected by the choice of phrases such as "the occupational therapist shall comply with guidelines" (COTEC, 2006, p.4) and "conform to accepted standards" (Occupational Therapy Board of New Zealand, 2004), and the frequent reference to legislative and institutional policies and regulations. When the professional association has been responsible for developing the standards, there seems to be a greater focus on the conceptual, ethical, and meta-cognitive aspects of occupational therapy (e.g. the Australian and Canadian documents).

Language choice

The competencies are generally presented with a main heading followed by explanatory details in sentence or list format, and usually begin with a verb. The language within the competencies following the Technical-Prescriptive frameworks is rather instructional, with regular use of words such as "shall", "should", and "must". Although at first glance the headings of the USA competencies would suggest a more methodological approach, regular use of language such as "facilitates", "collaboration" and "appropriate" application of the occupational therapy process, indicates that an Enabling framework has been used. The UK competency document recommends that practitioners exercise discretion in determining what is competent for their context, e.g. "assessment should be based on identifiable and justifiable reasons" (College of Occupational Therapists, 2007, p.2), which justifies its inclusion in the group of Enabling frameworks.

Intended Use

All competency standard documents were developed to provide practitioners with a guide to the expected levels of performance. Other applications identified include guiding curriculum development, informing service users, colleagues and employers of occupational therapy functions and responsibilities, and monitoring and enhancing standards of occupational therapy services and the profession. The UK document includes audit templates to assist practitioners to critique themselves or their service against the competency standards.

Other issues highlighted in the comparison of Australian occupational therapy competencies to other international OT competencies include:

Entry-Level definitions

Australia is the only country to define entry-level occupational therapy practice as the first two years of practice. No other country has made this distinction.

Competence definitions

Some countries imply that competence encompasses the minimum level for acceptable or adequate work performance (e.g. Hong Kong, Singapore, Sweden, COTEC, Australia, USA), whereas others (e.g. UK) indiscriminately include aspirational and basic expectations for performance. Australia and Canada are the only two countries to provide a definition of competence. Canada in fact distinguishes between proficient and competent performance. Competent performance is defined as "the requisite knowledge, skills and abilities expected throughout an occupational therapist's career" (College of Occupational Therapists of British Columbia, 2007), whereas a proficient practitioner is defined as one with similar competencies who can practice "with enhanced ease and sophistication in such areas as efficiency and quality, as well as a greater capacity to deal effectively with a wider range of complexity" (College of Occupational Therapists of British Columbia, 2007). These variations reflect that there is currently no international consensus amongst OTs as to how competence is conceptualised.

Need for Review:

Six of the 10 competency standard documents analysed recognized the need for review to retain currency. Of those which have been reviewed, the review cycles appear to be at four, five, or seven year intervals.

2.2.3 Extended Practice Area Competencies for Australian Occupational Therapy

As stated in the *Australian Competency Standards for Entry-Level Occupational Therapists* © (OT AUSTRALIA, 1994), it is recognised that certain areas of practice require competencies beyond those reasonable to expect of an entry-level practitioner. Accordingly, certain specialty areas within Australian occupational therapy practice - mental health (1999), driving (1998), acute health (2007), and medico-legal (2006) - have developed competencies relating specifically to their field. These documents are intended to be considered in conjunction with, and not to supersede, the entry-level competencies. While all of these specialty area competencies recognise the need for "regular" review, none specify when or how often this review should occur.

The emergence of these competency documents reflects the continually expanding scope and nature of occupational therapy practice in Australia. Competent practice in these specialty areas requires integration of multiple components from multiple domains during the clinical reasoning process. It is the complexity involved in this process which is considered beyond what can reasonably be expected from an entry-level OT. "Before an occupational therapist can effectively work in a specialized field, it is important that he or she has a range of clinical experiences upon which to draw. This can take several years, depending on the quality of the clinical experience and caliber of supervision and ongoing learning obtained over time" (OT AUSTRALIA NSW, 2006, p.3). There is currently no mechanism to enforce these competency standards for specialty areas amongst Australian OTs (Courtney & Farnworth, 2003). However if 'specialist' skills are to be precluded from entry-level competencies, it is important to distinguish between what constitutes general and specialist practice (Stone & Mertens, 1991).

Of the competencies developed for specialty areas, the mental health document is the only document applicable on a national scale. This, in addition to the variety of established roles for OTs in mental health, has required a less prescriptive and more enabling approach to formatting the standards, compared to the other competency documents. As argued earlier, whilst the scope of these specialty areas remains relatively circumscribed, it is appropriate to adopt a more instructional approach to formatting competencies.

A manual has been developed to guide Canadian educators evaluating student fieldwork placements. Seven competencies to evaluate student performance were identified and are presented in Table 12. The purpose of this manual was to promote nationally consistent standards in fieldwork assessment, "because professional programs vary in their curricula and the timing and duration of fieldwork placements within their curricula, [so] it is not possible to designate national, or cross-curricula, criteria for a passing grade" (Bossers et al., 2002, p.8). If students are expected to possess these competencies to pass their fieldwork assessments, then it would be presumed that these competencies are established in graduates upon completion of their degree. Indeed, "to graduate from an accredited program, a student must attain a level of professional competence equal to that of an entry-level clinician (Bossers et al., 2002, p.1).

2.3 Occupational Therapy: Today and Tomorrow

Within the current Australian climate, there is considerable potential for OTs to practise with clients across the lifespan and across industries within the array of health and human services. Roles now available to the occupational therapist at entry to practice include practitioner, educator, fieldwork educator, supervisor, administrator, consultant, policy-maker, fieldwork coordinator, faculty program director, researcher-scholar, entrepreneur, student, advocate, and support staff member (Abreu et al., 1998; Fortune et al., 2006; Rogers, 2005). The breadth and depth of our practice, and the fact that methods and approaches to practice are left to the discretion of the individual OT, is reflective of the Australian belief in "the equal right to freedom of choice in occupational therapy approach by therapists" (Cusick, 2001, p.112). As a profession, we encourage individual diversity amongst our practitioners, and trust in their prudential exercise of judgment in the context of their own setting, to determine the best approach to practice. OTs and their profession share a

symbiotic relationship: as the profession evolves practitioners develop new skills, and as the skills and characteristics of practitioners develop the potential for further service development emerges.

Table 12: Competencies Used for Evaluation of OT Student Fieldwork

7 Competencies to be Considered in Competency-Based Fieldwork Evaluation of Occupational Therapy Students (Bossers, Miller, Polatajko, & Hartley, 2002**)**	
1.	Practice Knowledge - discipline-specific theory and technical knowledge
2.	Clinical Reasoning - analytical and conceptual thinking, judgment, decision making, and problem solving
3.	Facilitating Change with a Practice Process – assessment, intervention planning, intervention delivery, and discharge planning
4.	Professional Interactions and Responsibility – relationship with clients and colleagues, legal and ethical standards
5.	Communication – verbal, nonverbal, and written communication
6.	Professional Development – commitment to profession, self-directed learning, and accountability
7.	Performance Management – time and resource management, leadership

It is, however, also important to maintain nationally consistent practice standards in occupational therapy. Although the current competencies state that therapists are expected to continue developing professionally, the impetus for this lifelong learning resides with the individual's personal integrity and commitment to excellence (Courtney & Farnworth, 2003). One study exploring the qualification levels of Australian OTs (Deen et al., 2002) found that while participation in workshops and training courses was common, few practitioners pursued higher level qualifications beyond entry-level. This implies that practitioners expect that their entry-level preparation will be sufficient to cope with typical workplace demands. To encourage continuing professional development and the pursuit of excellence in practice, OT AUSTRALIA introduced the Accredited Occupational Therapist Program (AccOT Program) in 2001. This initiative recognized that OTs must engage in lifelong learning to remain competent (OT AUSTRALIA, 2001).

While based on a small sample, findings from a study by Crowe and Mackenzie (2002) suggest that overall domestic demand for occupational therapy services will exceed an 80% growth rate over the next decade. Of the 14 non-information and communication technology professions that appear on the national skills shortage list, 12 are health professions, which includes occupational therapy (Australian Health Ministers, 2004). Challenges facing the future health force as identified by the Australian Health Ministers (2004) include maldistribution and shortages in the health workforce, demographic changes, an ageing population, empowered consumers, new technologies, and targeted priority areas including obesity, chronic disease, and health promotion. The Ministers recognised that even though priorities have been established for the next 10 years, "new community expectations and changing economies and environments will mean that the health needs of the Australian people, and the workforce required to meet those needs, will almost certainly change over time beyond this framework" (p.7). To deal with this uncertainty, clinicians must be skilled in responding to varying patient expectations and values, be capable of delivering and coordinating care across different teams, settings, and time frames, and advocate behavioural and lifestyle changes at individual and population levels (Greiner & Knebel, 2003).

As the Australian population becomes increasingly burdened with chronic and multiple morbidities, entry-level practitioners will require appropriate preparation and support to cope with the increased demands to meet community needs (Braithwaite & Travaglia, 2005). Considering the trend towards coordinating community-based and institutional health and social care settings "occupational therapists, with a traditional role in both health and social services, are key in developing closer, flexible working relationships between the services of these organizations without threatening their core professional identity" (Roberts, 2005, p.110). As services becoming increasingly collaborative and interdisciplinary, the effectiveness of the entire team, rather than individual practitioners, will be increasingly scrutinised. Evidence-based practice will require an evaluation of the entire team process (Lovelock, 2005).

It is imperative that we establish standards for the occupational therapy workforce to meet the healthcare needs of the future (Smith & Pilling, 2007). Considering that occupation is fundamental to our practice, the prominence of preventable 'lifestyle' diseases in the national priority health areas offers numerous avenues for further service development (Ford, Waring, & Boggis, 2007; Greiner & Knebel, 2003; Kornblau, 2001). The potential for extended scope practice is contingent on the skills of the individual practitioners. It is in fact likely that the services OTs will offer to future Australians are not yet formally established. The versatile nature of our profession has contributed to the pace with which we have adapted to accommodate population needs (McPherson et al., 2005). However, given the current demand for accountability, we must consider how to incorporate an evidence-based approach to practice in these emerging fields. Previously, clinicians were able to adopt an 'ad hoc' approach to skill development in specialty areas but this is becoming increasingly difficult. "The current context of service delivery is to an extent antagonistic to the development of junior staff" (Barnitt & Salmond, 2000, p.447). Graduates, who tend to be dependent on more experienced OTs to support them in acquiring new skills, may find that their colleagues are also relative novices in emerging fields of practice. At entry to the profession, OTs will be expected to be more autonomous (Clouder & Dalley, 2002; Lindstrom-Hazel & West-Frasier, 2004), with less supervision available (Allen et al., 2001; Walsh, 2002). Potentially, graduates could be encouraged to assume leadership roles and provide some impetus for professional rejuvenation, since their contemporary education may better prepare them for practice in these emerging areas, compared to their more experienced counterparts.

While increasing the number of places offered in occupational therapy educational programs to address the workforce shortage, there are also limited fieldwork placements available. Future preparation of OTs may require a deviation from the traditional models of education, but it will remain critical to provide the essential learning opportunities and experiences (Thomas et al., 2005). Since OTs are more likely to enter practice areas that they have encountered during student fieldwork experiences (Crowe & Mackenzie, 2002), opportunities to expose students to a broad range of practice areas must be incorporated into curriculum design (Fortune et al., 2006).

CONCLUSION

"Whilst the future is never certain, it is able to be contemplated and the impact of already known developments considered in any thinking about the future and the setting of strategic directions" (Australian Health Ministers, 2004, p.9). Contemporary occupational therapists acknowledge that completion of their entry-level qualification merely marks the beginning of a lifelong commitment to and pursuit of professional competence. Throughout their career, individual therapists will need to engage in regular critical evaluation of their knowledge, skills and attitudes, to ensure their competence, and the competence of their profession, is commensurate with essential work demands.

Competency standards must mirror the performance expected of practising OTs. Australian occupational therapy curricula have been reviewed and adapted in light of contemporary practice trends, and to satisfy requirements of the *Revised Minimum Standards for the Education of Occupational Therapists* (WFOT, 2002) and the generic graduate attributes specified by universities. However, the competencies enshrined by the *Australian Competency Standards for Entry-Level Occupational Therapists* © (OT AUSTRALIA, 1994) have not been adjusted to accommodate these changes. Of the three official documents impacting the design of Australian occupational therapy curricula, the national competency standards have the most significant influence. It is therefore important that the document stating and defining these competencies embodies not just the standards for practitioners of the past and present day, but also for future generations of OTs.

Summary of Identified Issues/Concerns for Revising the *Australian Competency Standards for Entry-Level Occupational Therapists* © (OT AUSTRALIA, 1994):

- **Structure and Framework**

- The current competencies are based on the Australian Qualifications Framework, which is endorsed by the NTB and adopted by other national industries and professions. This is considered beneficial in promoting national consistency and transparency of services.

- The current Enabling Framework of the Australian occupational therapy competencies accommodates the versatility and diversity which is characteristic of contemporary practice. Individual practitioners require guidance regarding how to approach practice, but must be allowed to exercise discretion in choosing specific techniques and interventions as appropriate to their context. Thus a certain degree of flexibility within competency standards is essential to endorse the concept of critically reflective practitioners. The document must permit and encourage further development and expansion of occupational therapy services.

- Word selection must be precise. While providing sufficient specificity to avoid confusion, it must also be flexible to accommodate contextual variation.

- **Format**

- A section within the competency standard document which introduces the scope, roles and priorities for contemporary and near future Australian OTs (including special populations and national health priority areas) would be considered beneficial.

- Contemporary competency standards must strike a balance between keeping consistent with internationally accepted concepts and philosophies of occupational therapy, whilst also recognizing the influence of national context on priorities and foci for Australian occupational therapy services.

- Although the competency standards were developed initially with the view to screen internationally trained OTs, the standards now play a key role in the design of curricula. It is worth investigating whether the standards can be revised to better guide curriculum development.

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- Considering that educators are charged with the responsibility of preparing future professionals to meet established standards of competency, they should be consulted during the review of competency standards. In reciprocal and complementary ways, practitioners should also be encouraged to invest in the educational preparation of future OTs, to maintain and enhance standards of practice.

- Considering the contemporary and likely future prominence of inter-professional practice, the competency standards should incorporate concepts and language that facilitates and supports collaboration with other health disciplines.

- **Uses of Competency Standards**

- The content and format of competency standards should be selected to accommodate the intended application/s of the document. Within this review, the following uses of competency standards have been identified: a benchmark to evaluate both individual practitioners and occupational therapy services; a means of maintaining and enhancing professional standards; to facilitate the development of higher level competencies; as reference for the design of entry-level education, continuing professional development training programs, and work re-entry programs; to screen internationally trained OTs; to inform service users, colleagues and employers of occupational therapy functions and responsibilities; a tool for employers to appraise workplace performance and develop job descriptions; and identify registration requirements in relevant states.

- **Frequency of Review**

- Despite the intention to create a document that would be regularly reviewed, the competencies have not been revised since their initial publication; nor do they specify a review cycle. Reviews of competency standards conducted by other countries/ disciplines seem to occur at four, five, or seven year intervals.

- It is important to regularly review competency standards; however each review does not demand a drastic revision. Depending on how prescriptive or enabling the competency standards are formatted, and how extensive the changes in practice are since the last revision, only a minor adjustment to the document may be required.

- **Defining Competence**

- There must be national consensus on what constitutes competence performance, despite heterogeneous practice settings and client groups. The definition of competence should consider the quality of performance expected and the degree of independence expected. It should be made clear whether competencies are conceptualized as aspirational, or simply a description of the minimum acceptable performance standards that the public can consistently expect from occupational therapy services. Furthermore, it should be determined whether 'best practice' is the minimum standard for contemporary and future competent practice.

- To provide further clarification, a distinction should be made between 'competent', 'excellent', and or 'proficient' levels of performance.

- If competencies for specialty practice areas are considered inappropriate for entry-level practitioners, then there must be a definition of what is considered general practice and what is considered specialty practice. As a means of quality control and accountability, it may be necessary to specify the practice areas in which an entry-level preparation is considered insufficient and further training is required.

- Considering the increasingly accountable and litigious nature of health care services, the competencies of entry-level OTs will face increasing scrutiny. OTs are expected to provide competent services to a population of increasingly aged, diverse, chronically ill and disabled Australians in a wide variety of contexts, at entry-level to the profession.

- **Entry-Level Competence**

- Based on this review, no other international occupational therapy community or national health profession appears to define its entry-level practitioners as those within their first two years of practice. For national and international consistency, the definition of entry-level competence for Australian OTs should be revised and made comparable to international occupational therapy standards and competencies for cognate allied health disciplines.

- The competencies which students are expected to achieve in order to pass fieldwork assessments provide a reference for the minimum competencies which can be reasonably expected of entry-level practitioners.

- **Future Developments**

- Issues for contemporary practice must be enshrined within the competency standards but near future trends must also be anticipated and considered so that practitioners and educators can ensure that the necessary competencies are developed.

- The increasing diversity in occupational therapy students will present more opportunities for expanding scope of services, so the rate of change in practice is likely to continue, if not increase.

- Changes to higher education and methods of learning (especially with the advent of information and communication technologies) and resource restraints have encouraged a departure from traditional teaching and instruction. This has implications for the standards of future generations of OTs, which should be considered when establishing competencies pertaining to OTs of the near future.

- **Concepts**

- To address contemporary issues, concepts and terminology of occupational therapy and health services, language of the *Revised Minimum Standards for the Education of Occupational Therapists* (WFOT, 2002) and *International Classification of Functioning, Disability and Health* (WHO, 2000) should be included in the revised competency standards.

- The phrase 'knowledge, skills and attitudes/values' is used by other Australian health disciplines to describe competency. This phrase also appears in the *Revised Minimum Standards for the Education of Occupational Therapists* (WFOT, 2002).

- While essential to identify the foundation knowledge, skills and attitudes expected of entry-level OTs, it is equally important to identify the essential competencies which will sustain their future development and refinement of skills to accommodate the evolutionary and heterogeneous nature of practice. Lifelong learning and continuing professional development must be emphasised in the competency standards.

- Considering that domestically trained OTs will be expected to possess the generic graduate attributes of their university and apply these in practice, the general themes of these attributes should be enshrined within competencies that are also used to assess internationally trained OTs who will practise in Australia.

- As members of the Australian health workforce, OTs must possess the competencies identified as essential for Australian health care workers.

- Practising OTs operate in numerous settings outside of the traditional clinical setting, on which the current competency standards are based. The competencies should be revised to reflect these additional roles and services. Recipients of occupational therapy services now encompass more than individuals clients and their families, but also communities, organizations, industries, and population levels.

- Considering the growing emphasis on research and continuing professional development, it may be worth providing explicit definition of the nature and frequency of these activities in the revised competency standards.

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- Important Terms to Consider/Emphasise:

* A return to occupation as the focus of intervention
* Accountability, efficiency, quality improvement, management skills
* Information and communication technology skills
* Accurate and timely documentation
* Client-centredness at individual and population levels, informed consent, advocacy, goal-directed treatment
* Evidence-based practice, research, lifelong learning and continuing professional development
* Paradigms influential to contemporary practice, e.g. cultural competence, reflective practice, occupational science
* Clinical reasoning and critical thinking
* Collaborative, inter-professional practice, team approach to health care services
* Autonomous, interdependent practice
* Adherence to organizational and legislative procedures and policies
* Education and health promotion
* Community-based models of care
* Project management

APPENDIX

N.B. To facilitate analysis, the GGAs have been organized into thematic categories (written in bold type). Beneath each category in italics are examples of statements/terms from the GGAs which met criteria for inclusion in that category.

Appendix 1: Comparing Themes of the Generic Graduate Attributes (GGAs) from the 13 Australian Universitiees with an Occupational Therapy School

Themes of Generic Graduate Attributes *(n= Number of GGA.s)*	**Mon. (draft 2007)** *(3)*	**C. Sturt** *(8)*	**E. Cowan** *(10)*	**Deakin** *(12)*	**Newc.** *(3)*	**Curtin** *(9)*	**Sydney** *(3)*	**Uni S.A.** *(8)*	**West Sydney** *(4)*	**La Trobe** *(5)*	**UQ** *(5)*	**JCU** *(12)*	**USC** *(7)*	**% agreement between universities**
Effective communication skills (*written & oral, interrelate to others, convey information*)	√	√	√	√	√	√	√	√	√	√	√	√	√	100
Displays attitude of enquiry & research (*enterprise, initiative, creativity, collect information*)	√	√	√	√	√	√	√	√	√	√	√	√	√	100
Demonstrates critical thought & analysis (*reflective judgement, synthesise information, organise information*)	√	√	√	√	√	√	√	√	√	√	√	√	√	100
Values-driven practice (*ethical, value & respect diversity, cultural, integrity, honesty*)	√	√	√	√	√	√	√	√	√	√	√	√	√	100
To work as an effective member of a team	●	√	√	√	√	●	√	√	√	√	√	√	√	84.62

Themes of Generic Graduate Attributes *(n= Number of GGA.s)*	**Mon. (draft 2007)** *(3)*	**C. Sturt** *(8)*	**E. Cowan** *(10)*	**Deakin** *(12)*	**Newc.** *(3)*	**Curtin** *(9)*	**Sydney** *(3)*	**Uni S.A.** *(8)*	**West Sydney** *(4)*	**La Trobe** *(5)*	**UQ** *(5)*	**JCU** *(12)*	**USC** *(7)*	**% agreement between universities**
Problem solving skills (*reasoning skills*)	√	√	√	√	√	●	√	√	√	●	√	√	√	84.62
Discipline-specific/ Professional knowledge	●	√	√	√	√	√	●	√	√	√	√	√	√	84.62
Awareness of national & international perspectives (*professional, intellectual, political*)	√	√	√	√	√	√	√	√	√	●	√	√	●	76.92
Commitment to life-long learning (*self-improvement, self-directed learning*)	●	●	●	√	√	√	√	√	√	√	√	√	√	76.92
Personal agency (*self management, personal autonomy*)	●	√	√	√	√	●	√	√	√	√	√	√	√	76.92
Civic Responsibility (*responsive to community needs, contributes to society & community, responsive to change, sustainable development*	●	√	√	√	√	●	√	√	√	●	√	●	√	69.23
Competency in Information and Communication	●	●	√	√	●	√	√	√	√	●	√	√	√	69.23

Themes of Generic Graduate Attributes *(n= Number of GGA.s)*	**Mon. (draft 2007)** *(3)*	**C. Sturt** *(8)*	**E. Cowan** *(10)*	**Deakin** *(12)*	**Newc.** *(3)*	**Curtin** *(9)*	**Sydney** *(3)*	**Uni S.A.** *(8)*	**West Sydney** *(4)*	**La Trobe** *(5)*	**UQ** *(5)*	**JCU** *(12)*	**USC** *(7)*	**% agreement between universities**
Technologies														
Use of tools & techniques	●	●	√	●	●	√	●	√	√	●	●	√	●	38.46
Literacy	●	●	●	√	●	●	√	●	√	●	●	√	√	38.46
Numeracy	●	●	●	√	●	●	√	●	√	●	●	√	●	30.77
Apply professional skills (*workplace experience, applied competencies*)	●	●	√	●	●	√	●	●	●	●	●	●	●	15.38
Awareness of how similar disciplines related to same field	●	●	●	●	●	●	●	●	√	●	√	●	●	15.38

*Average # GGAs per Uni = 6.85

*Analysis of GGAs included relevant sub-components where applicable

Mon. = Monash University C. Sturt = Charles Sturt University E. Cowan = Edith Cowan University Deakin = Deakin University
Newc. = The University of Newcastle Curtin = Curtin University of Technology Sydney = The University of Sydney
Uni. SA = University of South Australia West Sydney = University of Western Sydney La Trobe = La Trobe University
UQ = The University of Queensland JCU = James Cook University USC = University of the Sunshine Coast

Appendix 3

Online Survey Questions

Section A

Demographics: Please provide the following details:

Gender: ❑ M ❑ F

Age: ❑ 20 – 25 ❑ 26 – 30 ❑ 31 – 35 ❑ 36 – 40
❑ 41– 45 ❑ 46 +

Years of experience as OT –

❑ < 5 years
❑ 6 – 10 years
❑ 11– 15 years
❑ 16 + years

Professional Position –

❑ Head of school
❑ Accreditor
❑ Registration board representative
❑ ANZOTFA/fieldwork academic
❑ OT Australia representative
❑ Other

Experience with curriculum design –

❑ none
❑ minimal (less than 2 years)
❑ moderate (3 – 6 years)
❑ extensive (7 plus years)

Section B

Australian OT Competency Standards (AOTCS)

General Questions:

1. Which of the following best describes how you use [AOTCS] in your everyday practice (tick all that apply):

- ❑ as a reference point for curriculum design
- ❑ when accreditation self study modules are completed
- ❑ during university level curriculum review processes
- ❑ as a reference point as an accreditor
- ❑ when designing curriculum assessment tasks eg fieldwork
- ❑ other _____

2. In its current form, the [AOTCS] describes the expected level of competence of a therapist at the end of two years after graduation. At what stage of practice do you believe the competence levels should describe:

- ❑ at graduation
- ❑ within 1 year
- ❑ within 2 years
- ❑ other? _____

3. The current competencies have not been reviewed since 1994.

a. Should the [AOTCS] be reviewed regularly?

- ❑ Yes
- ❑ No

b. How often do you think the [AOTCS] should be reviewed?

- ❑ biennially
- ❑ every five years
- ❑ every 10 years
- ❑ other_____

4. The current [AOTCS] are framed within a unit of competency, followed by elements of practice and performance criteria identified for each element, with optional supporting cues.

E.g. UNIT 1: PROFESSIONAL ATTITUDES AND BEHAVIOUR

Element	1.6	Communicates effectively with clients and / or significant others.
Performance criteria	1.6.3	Where communication barriers and difficulties exist special effort is made to modify the means of communication.
Cues		* interpreter * lipreading * augmented communication systems

In your opinion, is this framework:

a.	Useful?	❑ Yes	❑ No
b.	Relevant?	❑ Yes	❑ No
c.	Appropriate to contemporary practice?	❑ Yes	❑ No
d.	Future oriented?	❑ Yes	❑ No

5. In its current version, the [AOTCS] describes 7 units of competence:

i) Professional Attitudes and Behaviour

ii) Assessment and Interpretation of Occupations, Roles, Performance and Functional Level of Individuals and Groups

iii) Implementation of Individual and Group Interventions

iv) Evaluation of Occupational Therapy Programmes

v) Documentation and Dissemination of Professional Information

vi) Professional Education

vii) Management of Occupational Therapy Practice

In your opinion:

a) Is there a need for any new units of competence? ❑ Yes ❑ No

If yes, _____

b) Would you like to see a change to this outline of 7 units of competence? ❑ Yes ❑ No

If yes, _____

6. Is there any aspect of OT practice that is not adequately covered in the current standards document?

❑ Yes ❑ No

If yes, _____

7. Is the current (e.g. hospital, community based rehab, private practice, schools, industry) and potentially future range of practice settings adequately addressed by the current competencies?

❑ Yes ❑ No

If no, what else is needed _____

8. What are your views on the development of specific competencies for particular areas of practice (eg mental health, CBR, acute care) that are over and above the generic entry level competencies?

_____

_____

9. *For Heads of School only* How are university graduate attributes used within development of curricula at your school?

_____

_____

10. Do you have any final comments?

_____

_____

11. This survey has been sent to [list all categories]. Can you think of any other categories of occupational therapists who should also receive it?

_____

_____

Appendix 4

Focus Groups Questions/Topics of Discussion

- Appropriate functions of the Competency Standards
- Utility of the current framework (i.e. Units, Elements, Performance Criteria, Cues)
- Gaps in the competency standards: Are additional units needed? Are basic aspects of practice covered?
- Are common themes of generic graduate attributes consistent with contemporary OT values and practice?
- Evaluation of each unit in terms of: Relevant? Appropriate? Contemporary? Future-Oriented?
- What stage of practice should the competencies apply? Why?
- Is a regular review cycle needed? If yes, most popular cycle length?
- Perspectives on competency standards for specialty practice areas.
- How should competence be defined within the competency standards?
- Is a competency standards document still necessary and relevant to practice? Why?

Appendix 5

Abstract for Conference Presentation at HERDSA 2008

Showcase: **Graduate Attributes and Professional Standards: Complementary or Competing Communities?**

Sub-theme: Engaging with each other

Presented by Dr Kay Martinez; Additional authors: A/Prof Sylvia Rodger, Prof Michele Clarke, Dr Mia O'Brien, Ms Rebecca Banks.

This showcase reports on work in progress on a project funded by the Carrick Institute that enabled researchers at the University of Queensland and James Cook University, supported by OT Australia (National), to collaborate on an environmental scan and needs analysis regarding the current Australian OT Competency Standards (OT Australia, 1994). An ultimate goal of the project is a revised set of competency standards for entry level Occupational Therapists (OTs) which reflect contemporary and future practice in Australia and are consistent with contemporary philosophy, research, values and theories underpinning professional OT practice. Additionally, if funding for Phase 2 is secured, the project will explore implications for refreshing OT programme curricula to align with the revised contemporary professional standards.

As part of the project, an extensive literature review was conducted. The review canvassed multiple definitions of standards and competence, changes in the national landscape affecting OT practice during the 14 years since the existing standards were developed, and a number of comparative analyses of sets of relevant standards. The HERDSA showcase focuses on these comparative analyses, which include:

- Generic Graduate Attributes from the 13 Australian universities that offer OT courses
- Competency Standards for 3 cognate allied heath fields (Speech Pathology, Physiotherapy and OT)
- Australian OT competency standards compared with the World Federation of OT (WFOT) Minimum Standards for Education of Ots
- Commonalities across Australian OT and WFOT standards and the Graduate Attributes of the 13 Australian universities offering OT.

A key feature of the project has been broad consultation with the OT profession in a range of ways: the involvement of OT Australia National at all stages; regular meetings with a reference group consisting of all Heads of School of OT in the 13 Australian universities offering OT programs; and a series of focus group interviews in all cities with OT programs, involving OT academics, recent graduates, clinical supervisors, and representatives of registration and accreditation authorities. This professional OT community can be seen as a highly significant community of practice within which OT operates.

Additionally, the development of new OT professional competency standards is necessarily grounded in the institutional higher education communities within which OT programs are located. The project acknowledges these communities through its analyses of university graduate attributes, the involvement of OT academics and university Teaching and Learning Development consultants, and its extended goal of exploring implications for curriculum development.

The showcase will open for consideration the dynamics of the interaction of these dual communities of practice – the professional and the higher education [sectors or fields?]. Such considerations of communities of practice are grounded in the work of Lave and Wenger (1991) and Wenger (1998). Additionally, we consider the work of Fuller et al (2005) which reminds us that communities of practice differ greatly with respect to stability, cohesion and openness. These authors suggest a need to understand more fully the messy, dynamic conditions of contemporary workplaces and so take into consideration issues such as power relations and inequalities, and the blurring of community boundaries. Jawitz's (2007) study of new academics' identity formation also added interesting complexities to thinking about multiple communities of practice and suggested a hierarchy of power and status among different communities of practice.

Showcase participants will be called upon to identify multiple communities of practice within their own workplaces, and to consider ways in which we assume positions within those communities as well as the formal and informal relationships between communities themselves.

Fuller, A., Hodkinson, H., Hodkinson, P. & Unwin, L. (2005). Learning as Peripheral Participation in Communities of Practice: A reassessment of key concepts in workplace learning. *British Educational Research Journal*, 31, 1, pp. 49-68.

Jawitz, J. (2007). New Academics Negotiating Communities of Practice: Learning to swim with the big fish. *Teaching in Higher Education*, 12, 2, pp.185-197.

Lave, J. & Wenger, E. (1991). *Situated Learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.

Wenger, E. (1998). *Communities of Practice: Learning, meaning and identity*. Cambridge: Cambridge University Press.

Appendix 6

Abstract for Conference Presentation at OT Australia National Conference 2008

Oral paper: Exploring Occupational Therapy Competencies for this Millennium: Charting the territory for change

Presented by A/Prof Sylvia Rodger and Ms Rebecca Banks; Additional authors Prof Michele Clarke, Dr Mia O'Brien, Dr Kay Martinez.

Target Audience:
All occupational therapists with an interest in ensuring that the OT Australia competencies for graduate occupational therapists meet current and future practice needs. This paper will be of interest to academics, fieldwork educators, clinicians, accreditors and members of registration boards.

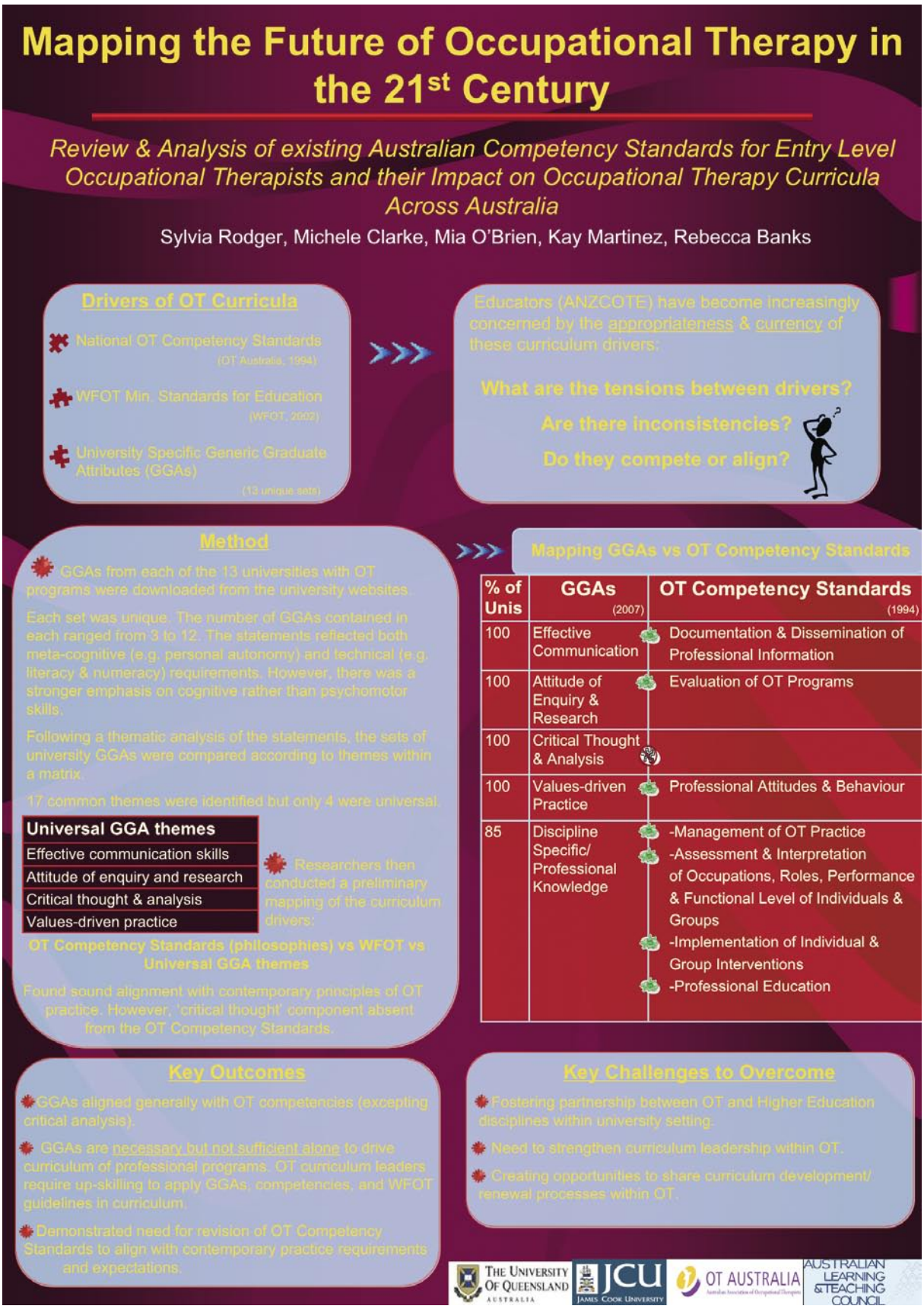
Aim or purpose:
This paper will present the outcomes of a project funded by the Carrick Institute that enabled researchers at the University of Queensland and James Cook University in conjunction with OT Australia National to undertake an environmental scan and needs analysis regarding the current Australian OT Competency Standards (OT Australia, 1994).

Discussion:
The paper will present outcomes from a web based survey undertaken with 26 heads of school, fieldwork academics, registration board members and accreditors, followed by focus groups conducted across the country in every city with an occupational therapy education program during 2008. Extensive consultation with multiple stakeholders by way of a project steering committee (project team and OT Australia nominees) and reference group (heads of schools, fieldwork academics, accreditors, registration board representatives) as well as with clinicians and students has led to the development of a series of recommendations for the revision of the Australian OT Competency Standards so that they meet the needs of contemporary and future occupational therapy practice that covers new and emerging areas.

Conclusion:
Recommendations relate to the frequency of review of the standards, issues with terminology/language used, potential for new units of competency and recommendations regarding use of the standards in curriculum development and enhancement.

Appendix 7

Poster Presentation at National Graduate Attributes Project Symposium 2008



Appendix 8

Project Newsletter (Issue 1)

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Review of the Australian OT Competency Standards: Carrick D.B.I. Project

A partnership between UQ, JCU & OT Australia (National)

Newsletter 1: Welcome & Orientation to the Project **September 2007**

What is the Carrick Institute?

The Carrick Institute for Learning and Teaching in Higher Education was established in 2004 to promote, support and advance the standards of learning and teaching in Australian higher education. The Carrick Institute Discipline-Based Initiatives (DBI) Scheme facilitates the collaborative efforts of discipline-specific leaders and their affiliated professional, industry and community stakeholders to ensure that graduates are appropriately prepared for the challenges of contemporary social and workforce contexts.

The Project in Brief

Researchers and academics at the University of Queensland and James Cook University have been successful in gaining funding from the Carrick Institute for a project entitled:

Mapping the future of Occupational Therapy Education in the 21st Century: Review and analysis of existing Australian Competency Standards for entry-level Occupational Therapists and their impact on Occupational Therapy Curricula across Australia.

Our ultimate vision for the project is a revised set of competency standards for entry-level Occupational Therapists (OTs), which reflect contemporary and future Occupational Therapy (OT) practice in Australia and are consistent with contemporary philosophy, research, values and theories underpinning professional Occupational Therapy practice. The revision process involving consultation with all national stakeholders will consolidate/affirm the collaborative culture of OT, while recognizing the dynamism of the profession in contemporary society. The reviewed competencies will provide national guidelines for responsive reform of OT curricula. Contemporary standards and reformed curricula will enrich learning experiences for OT students and make explicit their alignment with professional practice.

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Timeframes

This Discipline Based Initiative is proposed as a two stage activity with Stage 1 focusing on the scoping activity and Stage 2 (which will evolve from Stage 1) requiring further funds to: (1) develop a revised set of competency standards for entry level Occupational Therapists in Australia, and (2) to investigate good practice in curriculum and assessment design with respect to integration of graduate competencies within the curriculum.

The Stage 1 scoping activity will be executed over a 12-month period, commencing 1 September 2007 and ceasing 31 August 2008. Funding for Stage 2 has yet to be sought.

Project Aims: Stage 1

1. Investigate how the *Australian Competency Standards for Entry Level Occupational Therapists* © (OT Australia, 1994) are currently being used by OT Australia (and its accreditation panel), Schools of Occupational Therapy within their undergraduate and graduate entry programs, and by others within the profession.

2. Identify how Schools of Occupational Therapy use both the *Australian Competency Standards for Entry Level Occupational Therapists* © (OT Australia, 1994) and University level graduate attributes to inform curriculum at the course and program levels.

3. Investigate the use of graduate competency standards within the profession and among other allied health professions nationally and internationally.

4. Conduct a comprehensive review of the relevance, utility, and appropriateness of the *Australian Competency Standards for Entry Level Occupational Therapists* © (OT Australia, 1994) for documenting beginning competencies for current and future Occupational Therapy practice.

5. Identify where changes might be required to the *Australian Competency Standards for Entry Level Occupational Therapists* © (OT Australia, 1994), in terms of 'units of competency, elements, and performance criteria'.

6. Ensure that the *Australian Competency Standards for Entry Level Occupational Therapists* © (OT Australia, 1994) are consistent with the World Federation of Occupational Therapists (WFOT) (2002) Minimum Standards for Occupational Therapy Education.

7. The outcome of this scoping investigation is to map the future for developing new competency standards and the ways in which they can shape curricula and assessment in order to embed graduate attributes and discipline specific competencies to benefit student learning.

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Who are the Team?

Associate Professor Sylvia Rodger (University of Queensland - Head School of Occupational Therapy)
Professor Michele Clark (James Cook University - Head School of Occupational Therapy)
Mia O' Brien (University of Queensland - Teaching and Learning Institute)
Dr Kay Martinez (James Cook University - Teaching and Learning Institute)
Rebecca Banks (University of Queensland - Project Manager)

Critical to the project's success is the convening of and contributions from a Project Steering Committee and a Project Reference Group:

Steering Committee

A Steering Committee will be convened with representatives from OT Australia who will work with the Project Team (Drs Rodger, Clark, Martinez, and O'Brien). It is anticipated that four face- to-face meetings will be held in Brisbane during the project to advance each stage of the project.

Reference Group

All thirteen tertiary institutions with a School of Occupational Therapy will be represented and heads of Occupational Therapy schools in these institutions will be involved as Reference Group members, through their involvement with ANZCOTE (Australia and New Zealand Council of Occupational Therapy Educators). Heads of all training programs have endorsed the need for a review of the graduate competencies. Representatives from ANZOTFA (Australian and New Zealand College of Occupational Therapy Fieldwork Academics) and COTRB (Council of Occupational Therapy Registration Boards) will also be appointed to the group.

Reference group members will be involved in a series of teleconferences and in focus groups.

Project Phases

Phase 1: Current State of Practice
1.1 Literature Review of contemporary use of competency based standards in
Occupational Therapy and other cognate allied health disciplines (such as physiotherapy, speech pathology, and audiology) nationally and internationally will be conducted.
Competency documents utilised by these professions nationally will also be reviewed.

1.2 A Survey of the current use of *Australian Competency Standards for Entry Level Occupational Therapists* © (OT Australia, 1994) will be developed for telephone interview with 11 heads of OT schools throughout Australia, relevant staff nominated by OT Australia National, Chair of Registration Boards or nominee/s, and other relevant personnel (identified by snowball sampling).

Findings from the literature review and survey results will be disseminated through an interim report in February 2008.

Phase 2: Investigation of the Relevance, Utility and Appropriateness of *Australian Competency Standards for Entry Level Occupational Therapists* © (OT Australia, 1994).
Data from Phase 1 national and international literature review and survey on current use of competency standards will drive Phase 2. The aim of Phase 2 will be to ascertain multiple stakeholders' perspectives of the adequacy, relevance, utility, and appropriateness of the current standards and to identify what, if any, revisions or changes may be required. In this phase the relationship between competency standards and learning in higher education will also be explored. Two focus/forum groups will be held in all Australian cities in which there are one or more universities with an Occupational Therapy program. Heads of OT Schools in each city will be asked to nominate appropriate participants for these groups, such that multiple perspectives from a diverse group of stakeholders can be heard and understood.

Phase 3: Analysis and Reporting.
This phase of the project will involve;

- transcription of the focus/forum group recordings,
- analysis of these by project officer in conjunction with Project Team to ensure appropriate levels of peer checking
- member checking with participants of all the focus/forum groups by sending a summary of emergent themes, and
- presentation of these to the Steering Committee and Reference Group for feedback and comment.

From the literature review, knowledge of current use of competency standards and outcomes of focus/forum groups, a final report and list of recommendations will be developed and presented in August 2008. These will encompass the future use of the competencies, strengths of current standards, areas of concern, need for revision, integration or use of competencies with graduate attributes, curriculum design and use of discipline relevant assessment.

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Future Action

Online Updates

By the end of September, it is anticipated the project web page will be operational. This site will provide relevant stakeholders with information regarding the project, its progress, and permit access to reports from Phases 1 and 2.

Newsletters

Regular project updates in the form of newsletters will be provided via email to all members of the Reference Group (an on-line copy will also be available on the project website). This issue is the first of 3 newsletters that will be distributed over the next 12-month period. The release of the second issue is anticipated in late December.

Meetings

Initial meetings of the Steering Committee and Reference Group are necessary to develop and guide project actions, and ensure the project team remains on target. Considering the tight timeframes of the project, it is vital that these meetings occur in September. Project Manager Rebecca Banks will be in contact to inform relevant stakeholders of meeting dates and times.

Further meetings of the Reference Group are anticipated for February and June of 2008, to deliver findings from Phases 1 and 2 respectively.

Contact Details

For further information regarding the project, please direct enquiries to

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Appendix 9

Running Titles of Submitted Manuscripts

Rodger, S., Clark, M., Banks, R, O'Brien, M., & Martinez, K. (in press). *A national evaluation of the Australian Occupational Therapy Competency Standards: A multi-stakeholder perspective*. Australian Occupational Therapy Journal.

Rodger, S., Clark, M., Banks, R, O'Brien, M., & Martinez, K. (in press). *Bringing Australian Occupational Therapy Competencies into this Millenium: Comparisons with International Standards*. Australian Occupational Therapy Journal.

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