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Defining a set of common interprofessional learning competencies for health profession students

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ABSTRACT

Introduction: Increasingly recognized as a core component of contemporary health profession education, interprofessional learning outcomes remain difficult to define and assess across disciplines. The aim of this study was to identify a single set of interprofessional learning competency statements with relevance to all health professions.

Methods and results: Six national and international interprofessional competency frameworks were reviewed and combined to give a total of 165 competency statements. Following a process of mapping and grouping these statements into common content areas, duplicate content was removed. In addition, content deemed as a core competency for one or more individual health professions was removed. A round table of experts reviewed the remaining statements and agreed a final set of eight. Each statement was expressed as a specific learning outcome that could be assessed and which described behaviors and practices that students could routinely expect to engage with, and participate in, during the course of their study.

Conclusion: Identifying specific interprofessional competencies that students of all health professions require will enable more effective implementation of interprofessional learning activities and assessment within the core curriculum.

Background

There is an increasing emphasis on educating future health profession practitioners to learn, with, from, and about each other with the goal of improving health outcomes through more effective interprofessional collaboration (World Health Organisation 2010). Although conceptually straightforward, achieving this in practice within the core curriculum of individual health disciplines has been difficult (Ho et al. 2008; McKimm et al. 2010; Nisbet et al. 2011; Olson & Bialocerkowski 2014). Frequently cited barriers to a more interdisciplinary and/or interprofessional approach to learning and teaching include the significant logistic task of timetabling activities across different discipline curricula, resource constraints, disciplinary differences in assessment and professional accreditation council expectations, student diversity, and more general resistance to change (Pecukonis et al. 2008; Forte & Fowler 2009; Hoffman & Redman-Bentley 2012; Kezar & Elrod 2012). There are also complexities arising from the representation and availability of different health professions in any one university. Finding space in the already crowded curriculum adds further challenge.

In addition to these more practical considerations, sits the challenge of identifying exactly what medical, dental, nursing and other health profession students should be learning as part of an interprofessional curriculum. The development of students' professional identity and socialization is proposed as an important preparation for future interprofessional work (Arndt et al. 2009). Interactions with health professionals and students from other disciplines can provide a rich source of clinical experiences to support individual disciplinary professional identity formation. Ideally this occurs alongside the acquisition of skills and knowledge both disciplinary and interprofessional. However, there is a need to distinguish between the intent to support development of core disciplinary skills and professional identity in an interprofessional context for students, and the development of specific interprofessional knowledge and skills (Nisbet et al. 2011). It can be argued that many interprofessional learning activities comprise core disciplinary competencies that are being taught in an interprofessional context rather than addressing specific interprofessional learning competencies per se. Communication skills, for example, are core disciplinary competencies and there is little evidence that an interprofessional learning approach to teaching these skills enhances student learning outcomes (Lapkin et al. 2013). There remains a need to identify the key subset of specific

Practice points

Interprofessional learning competencies should:

- capture the specific knowledge and skills required for interprofessional practice
- not overlap disciplinary competencies in content
- be shared across different health professions
- be assessable and reflect behaviors and practices that students could routinely expect to engage with, and participate in, during the course of their study.

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knowledge and skills that students of all health professions require for interprofessional practice as the "missing part of the jigsaw".

Interprofessional practice and patient-centered care share many elements and intent (MacDonald et al. 2010; Englander et al. 2013; Fox & Reeves 2015). This includes a continuing need to demonstrate strong and consistent evidence that the changes to health practitioner and health system behaviors that are associated with these health care models are also associated with improved health outcomes (Olson & Bialocerkowski 2014). The importance of clearly defined constructs and realistic outcomes evaluation has been highlighted (Freeth et al. 2002; D'Amour & Oandasan 2005; Olson & Bialocerkowski 2014), lending greater weight to the call for a single set of interprofessional learning competencies that are widely agreed, implementable, and assessable.

In parallel to these developments in health care, universities are more overtly committing to graduating students with skills in collaboration and teamwork. This emphasis on learning outcomes and "graduate attributes" reflects a greater awareness of the abilities needed for employment and a responsiveness to employer and community needs and expectations (Nisbet et al. 2011; Oliver 2013). This environment in higher education creates an ideal context for the articulation of a single set of interprofessional learning outcomes (or competency statements) for students of all health professions.

Within Australia, as in many other countries, aspects of interprofessional learning and practice are appearing in health profession education accreditation standards. However, these standards tend to more general statements of principles than specific descriptions of interprofessional learning competencies. Examples include: "principles of inter-professional learning and practice are embedded in the curriculum" (Australian Dental Council 2014, p. 3); "the medical program ensures students work with, and learn from and about other health professionals, including experience working and learning in interprofessional teams" (Medical School Accreditation Committee 2012, p. 9); and "opportunities are provided for intraprofessional and interprofessional learning and the development of knowledge, skills and behaviors for collaborative practice" (Australian Nursing and Midwifery Accreditation Council 2012, p. 18). A lack of associated competency statements that set out how these standards might be achieved still leaves individual universities to "fill in the dots" when deciding what to teach their students. Where interprofessional learning competency statements do exist, the overlap with core disciplinary competencies is substantial and this mixing of interprofessional and disciplinary content hinders effective implementation and assessment.

The aim of this study was to identify a specific set of interprofessional learning competency statements that have relevance for all health professions. Formulated as assessable learning outcomes, these statements would capture the knowledge, skills and application of knowledge and skills required for interprofessional practice as distinct from disciplinary practice. In the literature the terms "interprofessional learning" and "interprofessional education" are both used. Although both terms were considered at all stages of the study, interprofessional learning was selected in reporting outcomes to ensure consistency.

Methods

The approach used in this study comprised a systematic analysis of existing data sets drawing on principles of qualitative coding combined with expert consensus.

The authors reviewed six national and international interprofessional competency frameworks previously identified in a comprehensive report as "important and influential" (Interprofessional Curriculum Renewal Consortium 2013, p. 32). Together these frameworks provided a total of 165 competency statements (Table 1).

An initial exercise was undertaken to map these frameworks to each other. Although similar in layout and structure, each of these interprofessional frameworks was constructed in a slightly different way so direct comparison or mapping to identify common content or redundancy was not feasible. Therefore, each framework was mapped to the Australian Learning and Teaching Council (ALTC) learning outcome statements for Health, Medicine and Veterinary Science (Table 2) (O'Keefe et al. 2011). These national ALTC learning outcome statements define a set of six learning outcomes that are common to all Australian healthcare disciplines across the categories of professionalism, clinical practice, health promotion, evidence based practice, collaboration and life-long learning (O'Keefe & Henderson 2013). The main purpose of this initial mapping

Table 1. National and international interprofessional competency frameworks included in the study.

Authoring body	Statements
Canadian Interprofessional Health Collaborative (2010). A national interprofessional competency framework.	39
Interprofessional Education Collaborative Expert Panel (2011), Core competencies for interprofessional collaborative practice: Report of an expert panel, Interprofessional collaborative.	38
Combined Universities Interprofessional Learning Unit (2004) Interprofessional capability framework: A framework containing capabilities and learning levels leading interprofessional capability.	42
Griffith Health IDEAS (2011). An interprofessional framework for interprofessional learning at Griffith Health 2011–2014.	10
Brewer & Jones (2013). An interprofessional capability framework focusing on safe, high quality client-centered health services Curtin University Interprofessional Capability Framework	24
Faculty of Medicine, Dentistry and Health Sciences (2010). Interprofessional Education & Collaborative Practice. A Curriculum Framework. The University of Western Australia.	12

Table 2. Learning Outcome Statements for Health, Medicine and Veterinary Science.

Upon completion of their program of study, healthcare graduates at professional entry-level* will be able to: (*as defined by each individual discipline)

1. Demonstrate professional behaviors
2. Assess individual and/or population health status and, where necessary, formulate, implement and monitor management plans in consultation with patients/clients/carers/animal owners/communities
3. Promote and optimize the health and welfare of individuals and/or populations
4. Retrieve, critically evaluate, and apply evidence in the performance of health-related activities
5. Deliver safe and effective collaborative healthcare
6. Reflect on current skills, knowledge and attitudes, and plan ongoing personal and professional development.

O'Keefe M et al. (2011). Health, Medicine and Veterinary Science – Learning and Teaching Academic Standards Statement. Australian Learning & Teaching Council

using the ALTC learning outcome statements as an organizing structure was to identify common content areas.

A thematic analysis was conducted whereby the three authors independently allocated each of the 165 interprofessional statements to one of the six ALTC learning outcome categories (Braun & Clarke 2006). Following comparison of these initial allocations, differences in selections between the authors were identified and discussed. The authors gave careful consideration to the intent of the item under review, and the best fit within the categories. Discussion continued until consensus was achieved on the optimal allocation for all statements.

Following this initial allocation, a word cloud analysis was undertaken for each ALTC learning outcome category (Worditout). All the statements allocated to a particular category were loaded into the online tool and a word cloud was generated. In a word cloud the frequency with which a word appears is represented by the relative size of that word in the word cloud. The greater the font size, the greater the frequency with which that word appears in the original text as compared with other words.

Based on the relative font size used for each word in the word cloud, the 10 most frequently appearing words in each learning outcome category were identified and ranked in order of frequency. Where various forms of a word were included these were aggregated and the ranking order adjusted accordingly. Each time a word was identified, the actual number of times it occurred was confirmed using the search function within the original electronic document text. Starting with the most frequently appearing word, all statements containing that word were grouped and then removed from the initial category pool.

For example, within the category of "professionalism" there were 45 statements loaded into the online tool. Within the word cloud that was then generated, the largest fonts were associated with the words "respect" "practice" "conflict" "care" "patients" "team" "knowledge" and "skills". Using a simple search function, eleven statements were identified that contained a form of the word "respect" (respect/s/ful/fully). These 11 statements were removed from the 45 initial statements in this category and grouped together. Once the 11 statements containing a variation of the work respect were removed, there were no remaining statements that contained the words "practice", "conflict" or "care". Within the remaining 34 statements the next most commonly occurring word was "patient/s". Nine of the 34 remaining statements contained the word patient/s. These nine statements were then removed and grouped together leaving 25 statements that were searched for occurrences of the next most frequently identified word. This process continued until all statements were grouped. Each statement could only be allocated once.

As a result of the activity described above, the 165 interprofessional learning statements were clustered into groups within each of the six ALTC learning outcome categories according to their content. Duplicate statements were identified within each group and removed. Common content was combined into single statements. Competencies that were deemed as core for health professional practice irrespective of whether this was uniprofessional or multiprofessional were also set aside as not being specifically required for interprofessional learning. Examples of statements deemed to reflect a core professional competency as distinct from a specific interprofessional competency included: Develop trusting relationships with patients/clients/families and other team members (Canadian Interprofessional Health Collaborative 2010, p. 16); Apply leadership practices that support collaborative practice and team effectiveness (Interprofessional Education Collaborative Expert Panel 2011, p. 25); Uses knowledge of non-judgmental and anti-discriminatory practice when contributing to decision making processes in the interprofessional team (Combined Universities Interprofessional Learning Unit 2004, p. 69).

The remaining statements at the conclusion of this process were deemed to represent a set of specific interprofessional learning competency statements. The authors then undertook editing to improve consistency of presentation and formulation with a focus on clarity, specificity, and assessability. To assist this outcome, each of the draft competencies was expressed as a specific learning outcome.

These draft competency statements were presented to a roundtable of 12 national experts including representatives from federal and state government departments of health, senior university academics and directors of health profession accreditation councils. Roundtable members were invited to contribute to the development of a final set of statements.

Results

The distribution of the 165 statements across the ALTC learning outcome categories is shown in Table 3 along with the most frequently appearing words within each category. A set of 12 draft competency statements was presented to the roundtable participants for review.

Table 3. Grouping of competencies by Learning Outcome Statements.

Category	Professionalism	Clinical practice[b]	Health promotion[b]	Evidence based practice[b]	Collaboration	Life-long learning
Number of statements	45	8	5	6	83	18
Frequency ranking of key terms (highest to lowest)	Respect[a] Patient[a] Team Practice Care Conflict Knowledge Skills	Patient/client[a] Participation Services	Services, Boundaries, Accountability	Evidence	Care Practice Patient Roles Knowledge Communic[a] Collabor[a] Team[a]	Development Profession[a] Team Reflect[a]

[a]Word stem.
[b]Very small numbers of statements.

Table 4. The Interprofessional learning competency statements.

IPL competency statements
The principles of interprofessional learning encompass understanding, valuing and respecting individual discipline roles in health care. Interprofessional practice places the interests of patients and populations at the center of health care delivery. A key element of interprofessional practice is the recognition and use of the skills of other health professionals in health care delivery. It is supported by interactions that clarify perspectives, and enable insights and learning from other health professions.
On completion of their program of study, graduates of any professional entry-level healthcare degree will be able to:
• Explain interprofessional practice to patients, clients, families and other professionals
• Describe the areas of practice of other health professions
• Express professional opinions competently, confidently, and respectfully avoiding discipline specific language
• Plan patient/client care goals and priorities with involvement of other health professionals
• Identify opportunities to enhance the care of patients/clients through the involvement of other health professionals
• Recognise and resolve disagreements in relation to patient care that arise from different disciplinary perspectives
• Critically evaluate protocols and practices in relation to interprofessional practice
• Give timely, sensitive, instructive feedback to colleagues from other professions, and respond respectfully to feedback from these colleagues

Roundtable interactions were characterized by rigorous discussion and the development of shared understandings of interprofessional learning across the different health disciplines and contexts represented. In reviewing these draft statements, it was determined that some were better articulated within an overarching statement of principles or combined with other statements. Therefore, the outcome of these deliberations was a redrafting of the original set of twelve competencies into a set of eight interprofessional learning competencies together with a new statement of principles that made clear the central place of the patient in relation to interprofessional practice (Table 4) (Health Professions Accreditation Councils' Forum 2015).

Discussion

This paper describes work undertaken to provide specific guidance for Australian universities on how they can ensure health profession graduates are meeting professional accreditation standards in relation to interprofessional learning. A set of distilled competency statements was developed from the suite of competency statements contained within existing national and international frameworks with relevance across health disciplines and professions. Each of the final statements is expressed as a specific interprofessional learning outcome.

As noted earlier, multiple frameworks and interprofessional learning competency statements exist that have been developed by different jurisdictions, often with very similar content and intent. However, the specific, assessable competencies to be acquired by all students as a result of participating in interprofessional learning activities have been unclear. Such a set of competencies should be distinct from competencies that are expected within each individual discipline and should reflect true interprofessional learning outcomes.

In crafting the competency statements, attention was paid to ensuring included content related to one or more specific aspects of interprofessional learning or practice. Where content overlapped with more general professional competencies, this content was set aside as it would be already addressed in disciplinary and profession specific competency statements and accreditation requirements. As a result of this approach, much of the content of the identified interprofessional learning competencies addresses the importance of health professionals developing specific understandings of the roles of other professions and the implications for interactions in practice across different professional groups, rather than to more generic outcomes pertaining to communication and collaboration skills.

The approach used in this study is similar to that used in the development of the British Columbia competency collaboration framework (Wood et al. 2009). This earlier work successfully employed processes that drew on professional associations' standards and codes of ethics, and engagement with a range of health professionals to define the knowledge, skills and attitudes needed for collaborative work. The present articulation of interprofessional competency statements departs from this previous work as it focuses specifically on interprofessional learning outcomes rather than the broader competency of collaborative practice.

The articulation of common, relevant learning outcomes is an important support for student interprofessional learning especially when students come to the learning activity with diverse prior interprofessional skills and experiences (Bradley et al. 2009). The development of collaborative professional networks also requires the acceptance of common models of interprofessional learning across professions (Bainbridge 2014). A lack of general agreement on a set of specific and assessable interprofessional learning outcomes (as distinct from disciplinary learning outcomes) has in the past provided universities with very little guidance on what it is they were expected to be facilitating and supporting in learning activities and assessments with their students. It is also the case that in the absence of specific and assessable learning outcomes that are derived from specific competencies, there is a risk that the assessment of interprofessional learning will focus on process rather than outcome measures. While it is relatively straightforward to assess process related activities such as participation, a more robust assessment approach is based on determining achievement of specific interprofessional learning outcomes. This is particularly relevant in relation to student learning within experiential clinical placements and portfolio led activities.

As has been described, the interprofessional competency statements developed in this study were formulated to be assessable. Each individual competency can be assessed in a number of different ways including role-play, observed structured clinical examinations (OSCE), or preceptor assessments of clinical practice on placements. Therefore, the learning outcomes describe behaviors and practices that students can routinely expect to engage with and participate in during the course of their study. Furthermore, the described behaviors and practices can be objectively assessed and recorded.

A further feature identified through mapping the original set of 165 identified competency statements against the ALTC learning outcome statements for health was the extent to which interprofessional learning can be embedded across the entire core health professional

curriculum. Interprofessional competencies have relevance across the domains of professionalism, clinical practice, health promotion, evidence-based practice, collaboration and lifelong learning. Demonstrating this relevance across the full spectrum of health profession curricula may go some way to explaining why it has been so difficult to capture an achievable and assessable set of interprofessional learning outcomes. The distillation of a core set of specific interprofessional competencies that are complementary to existing disciplinary competencies (such as communication and collaboration) should assist the further development of specific, valid and reliable assessment approaches. The specific and focused nature of the interprofessional learning outcomes are a useful addition to core disciplinary skills such as respect, trust, communication and teamwork that are increasingly being effectively accommodated into the curricula of health disciplines. At the same time institutions can continue to exercise choice in selecting specific learning activities to support achievement of expected interprofessional learning outcomes. Sharing of a single set of competencies across health professions should also facilitate interprofessional learning curriculum development.

The work reported in this paper was conducted in the Australian context. While, interprofessional competencies were drawn from international and Australian sources, experts most familiar with the Australian higher education and health care systems formulated the consensus statements. Arguably, the learning outcome statements reflect issues and the learning desired for work in the Australian context. In saying that, the challenges for interprofessional learning are clearly acknowledged in the international arena. Therefore, the utility of these statements is likely to be much broader than the Australian context. It is also the case that only six frameworks were used for the initial mapping and to provide the content for analysis. A genuine attempt was made to identify an international sample of frameworks that represented contemporary understandings of interprofessional learning and practice. The extent of overlap of content even within these frameworks decreased the likelihood that significant omissions were made. However, this may have occurred and the suitability and usability of the proposed competencies should be tested in many different environments.

As a final observation, undertaking this activity highlighted an emphasis on interactions between health professionals in existing statements. References to patients/client were surprisingly few. If the underlying ethos of interprofessional practice is to promote patient centered care and optimize patient health outcomes, there may still be a need for a greater focus on the patient. In the current set of competency statements, there is an initial statement of principle that "interprofessional practice places the interests of patients and populations at the center of healthcare delivery" (Table 4). In the view of the authors this is something that should always be prominent in the formation of future health professionals.

Conclusions

While there is general agreement on the importance of interprofessional learning, there is still the need for a set of specific and assessable learning outcomes that are applicable across all health professions. Ensuring achievement of the interprofessional learning competencies described in this paper will provide clarity for students, lecturers, and course coordinators regarding professional expectations from interprofessional learning activities and assessments. Clarifying the complementary to existing disciplinary competencies (such as communication and collaboration) should further assist development of specific, valid and reliable assessment approaches for interprofessional learning.

Glossary

Competence The ability to do something successfully or efficiently (Oxford English Dictionary)

Interdisciplinary Relating to more than one branch of knowledge (Oxford English Dictionary)

Interprofessional learning/education Interprofessional education occurs when two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes (World Health Organisation 2010).

Disclosure statement

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Institutional ethics approval

The University of Adelaide Human Research Ethics Committee approved this study.

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References

Arndt J, King S, Suter E, Mazonde J, Taylor E, Arthur N. 2009. Socialization in health education: encouraging an integrated interprofessional socialization process. J Allied Health. 38:18–23.

Australian Dental Council (ADC)/Dental Council New Zealand (DC(NZ)). 2014. Accreditation Standards for Dental Practitioner Programs December 2014 [Internet]. [cited 2016 Aug 30]. Available from: http://www.adc.org.au/documents/Accreditation

Australian Nursing and Midwifery Accreditation Council. 2012. Registered Nurse Accreditation Standards 2012 [Internet]. [cited 2016 Aug 9]. Available from: http://www.anmac.org.au/sites/default/files/documents/ANMAC_RN_Accreditation_Standards_2012.pdf

Bainbridge L. 2014. Interprofessional education in allied health: is this yet another silo? Med Educ. 48:225–233.
Bradley P, Cooper S, Duncan F. 2009. A mixed-methods study of interprofessional learning of resuscitation skills. Med Educ. 43:912–922.
Braun V, Clarke V. 2006. Using thematic analysis in psychology. Qual Res Psychol. 3:77–101.
Brewer ML, Jones S. 2013. An interprofessional capability framework focusing on safe, high quality client-centred health services. J Allied Health. 42:45–49E.
Canadian Interprofessional Health Collaborative. 2010. A national interprofessional competency framework [Internet]. [cited 2016 Aug 9]. Available from: http://www.cihc.ca/files/CIHC_IPCompetencies_Feb1210.pdf
Combined Universities Interprofessional Learning Unit. 2004. Interprofessional capability framework: a framework containing capabilities and learning levels leading interprofessional capability. The University of Sheffield and Sheffield Hallam University, Sheffield [Internet]. [cited 2016 Aug 9] Available from: http://caipe.org.uk/silo/files/cuilupdf.pdf
D'Amour D, Oandasan I. 2005. Interprofessionality as the field of interprofessional practice and interprofessional education: an emerging concept. J Interprof Care. 19:8–20.
Englander R, Cameron T, Ballard AJ, Dodge J, Bull J, Aschenbrener CA. 2013. Towards a common taxonomy of competency domains for the health professions and competencies for physicians. Acad Med. 88:1088–1094.
Faculty of Medicine, Dentistry and Health Sciences. 2010. Interprofessional Education & Collaborative Practice. A Curriculum Framework. The University of Western Australia [Internet]. [cited 2016 Aug 9]. Available from: http://www.meddent.uwa.edu.au/__data/assets/pdf_file/0006/2495256/IPE_Collaborative-Practice-Curriculum-Framework_Final-2010.pdf
Forte A, Fowler P. 2009. Participation in interprofessional education: an evaluation of student and staff experiences. J Interprof Care 23:58–66.
Fox A, Reeves S. 2015. Interprofessional collaborative patient-centred care: a critical exploration of two related discourses. J Interprof Care 29:113–118.
Freeth D, Hammick M, Koppel I, Reeves S, Barr H. 2002. A critical review of evaluations of interprofessional education. London: Higher Education Academy. Health Sciences and Practice Network.
Griffith Health IDEAS. 2011. An interprofessional framework for interprofessional learning at Griffith Health 2011–2014, Griffith University, Griffith Queensland [Internet]. [cited 2016 Aug 9]. Available from: https://www.griffith.edu.au/__data/assets/pdf_file/0010/475768/GriffithHealthIPLFramework.pdf
Health Professions Accreditation Councils' Forum. 2015. Interprofessional Learning. Position Statement 2015 [Internet]. [cited 2016 Aug 30]. Available from: http://www.healthprofessionscouncils.org.au/statements-and-submissions
Ho K, Jarvis-Selinger S, Borduas F, Frank B, Hall P, Handfield-Jones R, Hardwick D, Lockyer J, Sinclair D, Lauscher HN, et al. 2008. Making interprofessional education work: the strategic roles of the academy. Acad Med. 83:934–940.
Hoffman J, Redman-Bentley D. 2012. Comparison of faculty and student attitudes toward teamwork and collaboration in interprofessional education. J Interprof Care. 26:66–68.
Interprofessional Curriculum Renewal Consortium. 2013. Curriculum renewal for interprofessional education in health. Sydney: Centre for Research in Learning and Change, University of Technology.
Interprofessional Education Collaborative Expert Panel. 2011. Core competencies for interprofessional collaborative practice: Report of an expert panel, Interprofessional collaborative, Washington, DC [Internet]. [cited 2016 Aug 9]. Available from: http://www.aacn.nche.edu/education-resources/ipecreport.pdf
Kezar A, Elrod S. 2012. Facilitating interdisciplinary learning: lessons from project Kaleidoscope. Change. 44:16–25.
Lapkin S, Levett-Jones T, Gilligan C. 2013. A systematic review of the effectiveness of interprofessional education in health professional programs. Nurse Educ Today. 33:90–102.
MacDonald MB, Bally JM, Ferguson LM, Murray BL, Fowler-Kerry SE, Anonson JMS. 2010. Knowledge of the professional role of others: a key interprofessional competency. Nurse Educ Pract. 10:238–242.
McKimm J, Sheehan D, Poole P, Barrow M, Dockerty J, Wilkinson TJ, Wearn A. 2010. Interprofessional learning in medical education in New Zealand. NZ Med J (Online). 123:1320.
Medical School Accreditation Committee. 2012. Standards for Assessment and Accreditation of Primary Medical Programs by the Australian Medical Council 2012 [Internet]. [cited 2016 Aug 9]. Available from: http://www.amc.org.au/accreditation/primary-medical-education/standards
Nisbet G, Lee A, Kumar K, Thistlethwaite J, Dunston R. 2011. Interprofessional Health Education – a literature review – overview of International and Australian developments in Interprofessional health Education (IPE) [Internet]. [cited 2016 Aug 5]. Available from: http://www.health.wa.gov.au/wactn/docs/IPEAUSlitreview2011.pdf
O'Keefe M, Henderson A. 2013. Identifying common learning outcomes for health: celebrating diversity and maximising benefit from regulatory necessity. Med Teach. 35:970.
O'Keefe M, Henderson A, Pitt R. 2011. Health, Medicine and Veterinary Science – Learning and Teaching Academic Standards Statement. Australian Learning & Teaching Council [Internet]. [cited 2016 Aug 9]. Available from: http://www.olt.gov.au/resource-library
Oliver B. 2013. Graduate attributes as a focus for institution-wide curriculum renewal: innovations and challenges. Higher Educ Res Dev. 32:450–463.
Olson R, Bialocerkowski A. 2014. Interprofessional education in allied health: a systematic review. Med Educ. 48:236–246.
Oxford English Dictionary [Internet]. [cited 2017 Jan 23]. Available from: https://en.oxforddictionaries.com/
Pecukonis E, Doyle O, Buss DL. 2008. Reducing barriers to interprofessional training: promoting interprofessional cultural competence. J Interprof Care. 22:417–428.
Wood V, Flavell A, Vanstock D, Bainbridge L, Nasmith L. 2009. The road to collaboration: developing an interprofessional competency framework. J Interprof Care. 23:621–629.
Worditout [Internet]. [cited 2015 Jun 2]. Available from: http://worditout.com/word-cloud/make-a-new-one
World Health Organisation. 2010. Framework for action on interprofessional education and collaborative practice [Internet]. [cited 2016 Aug 5]. Available from: http://www.who.int/hrh/resources/framework_action/en/