

Braithwaite and Associates

ABN 40 066 294 406

Options for change in health care

The ACT Health inter-
professional learning and
clinical education project:
background discussion paper
#2



Inter-professional practice

A project for ACT Health conducted by Braithwaite and Associates, an Australian consulting practice providing Options for Change in Health Care.

Inter-professional learning and clinical education: A background discussion paper

Duration of project

August-December 2005

Search period

1892 to 18th August 2005

Key words searched

Words and phrases related to 'inter-professional learning' and 'clinical placement'

Databases searched

- Medline from 1966 to August Week 2 2005
- Embase: Excerpta Medica from 1988 Week 33 2005
- CINAHL from 1982 to August Week 2 2005
- Emerald Fulltext from commencement of the database
- Science Direct from 1967
- PsycINFO from 1892

Criteria applied

We searched for the key terms as listed. Documents were largely limited to English.

Contact details

A/Professor Jeffrey Braithwaite
Email: j.braithwaite@unsw.edu.au
Phone: +61 2 9385 2590

Ms Jo Travaglia
Email: j.travaglia@unsw.edu.au
Phone: +61 2 9385 2594

Braithwaite and Associates
157 Fullers Rd
Chatswood NSW
Australia 2067

Tel: ++ 61 2 9385 2590
Fax: ++ 61 2 9663 4926
Mobile: ++ 0414 812 579
After hours: ++ 61 2 9904 8383

Contents

1. Executive summary.....	4
2. Introduction	5
3. Research methods.....	6
4. Discussion: Inter-professional practice	7
4.1 Competencies for inter-professional practice	7
4.1.1 Explicit inter-professional competencies	8
4.1.2 Inherent inter-professional competencies	9
4.1.3 Embedded inter-professional competencies	10
4.2 Translating theory into practice	12
5. Conclusion	13
6. References	14

1. Executive summary

In this discussion paper we present the findings of a literature review on inter-professional practice. The information is drawn from an extended review of the literature contained in the companion document *Inter-professional learning and clinical education: an overview of the literature*, and is the second of four discussion documents. A composite picture of the whole topic of inter-professional learning and clinical placement can be obtained by reading all four documents.

In the literature reviewed, it was found that inter-professional practice:

- Draws on three sets of competencies: those specifically identified as relating to inter-professional practice (explicit), those inherent in professional standards (inherent); and those that can be inferred from the literature on inter-professional learning and practice (embedded);
- Is inconsistently understood and applied; for example, there is no Australian set of inter-professional competencies, although most Australian health professions have some aspects of inter-professional competencies listed in their standards;
- Competencies vary, but most include the knowledge, skills and attitudes associated with collaborative, patient-centred and teamwork practice, high level communication and conflict resolution skills and the ability to deal with complexity and uncertainty through flexibility and innovation;
- Is dependent on student and practitioners' ability to translate theory into practice, with the support of modeling, scaffolding, articulation, reflection and exploration within safe education and working environments.

2. Introduction

This paper is one of a series of four background discussion documents examining inter-professional learning and clinical education on behalf of ACT Health. It is drawn from an extended review of the literature contained in the companion document *Inter-professional learning and clinical education: an overview of the literature*. The four discussion documents are:

1. Background discussion paper #1: the governance and value of inter-professional learning and practice
2. Background discussion paper #2: inter-professional practice
3. Background discussion paper #3: inter-professional relations
4. Background discussion paper #4: clinical education and placements.

Each paper is designed to be read separately, and is written for those with a specific interest in that particular theme. A composite picture of the whole topic of inter-professional learning and clinical placement can be obtained by reading all four documents. Those seeking more information on the project background and methods should contact the consultants.

3. Research methods

The researchers conducted four search strategies to uncover available literature on the topic: an electronic search of six academic databases, hand searching of key journals, an examination of grey literature and websites, and snowballing, i.e., securing important references cited frequently in materials already gathered through the first three search strategies. Once assembled, we categorised the materials thematically and also subjected them to a content analysis technique via Leximancer, a software tool which facilitates the conceptualisation and analysis of large text files. We then subjected our thematic categorisation of the literature to a secondary analysis by the Inter-professional Learning Project Reference Group, a body sponsored by ACT Health with responsibilities for guiding the project, consisting of a wide range of stakeholders from the health and education sectors of the ACT, and across the disciplines of nursing, midwifery, medicine and allied health.

Through this method we found and downloaded 62,436 references and, after subjecting them to several refinement processes, reduced these to 37,812 useful references. These are provided in an additional document: *Inter-professional learning and clinical education 1990-2005: an annotated list of the literature*. Further refinement processes led us to reduce the number of references to the 3,765 key documents used in the project.

4. Discussion: Inter-professional practice

When we talk about professional practice in the context of interprofessional learning, we are essentially discussing two concepts: competencies of professionals and educators, and the process of translating theory into practice. In the context of understanding inter-professional practice, these two ideas frequently recur in the literature.

4.1 Competencies for inter-professional practice

The adoption of a competency-based approach to education and practice¹ in the health professions has led to the identification and standardisation of discipline-specific²⁻⁵ and cross-discipline competencies.^{6 7 8} Inter-professional learning has provided impetus both for the construction of cross-discipline competencies, and for their use in clinical education.^{9 10 11-13}

In order to decipher what competencies are relevant to inter-professional learning and practice, it is important to make a distinction. Competencies are the *“... knowledge, skills, and attitudes that learners must acquire to be able to perform within each domain at a predetermined level and to recognize that the expected level of performance within each domain will vary depending on the learner's stage of education and the specialty he or she is learning”*. They are commonly used in outcomes-based education and training.^{14 15}

Competency standards are codified sets of competencies which relate to an occupation or area of practice.¹⁶ Competency standards can apply to individual disciplines (e.g. competency standards for nurses or physiotherapists) or can cut across disciplines (e.g. competency standards for public health, child mental health or rehabilitation). Competency standards are generally issued by professional or accrediting organisations.^{17 18}

There are three major sources of competencies for inter-professional practice. The first group are those which are explicitly and solely about inter-professionalism (explicit inter-professional competencies).¹⁹ The second group of competencies are those which address associated issues (for example collaboration or teamwork in health) either as an integrated set of standards, or more commonly as units or elements within the competency standards or curricula of professional groups and educational institutions (inherent inter-professional competencies).²⁰ The third group of inter-professional competencies are those which can be inferred from the literature on inter-professional education and practice (embedded inter-professional competencies).²¹

4.1.1 Explicit inter-professional competencies

Oandasan et al. (2004) hypothesize that if health professionals are trained in collaborative competencies, then "... *the potential for change in workforce patterns may occur.*"²² Few articles were available which explicitly set out to identify the competencies required for inter-professional practice. Barr identifies competencies that are associated with inter-professionalism, such as collaborative practice, change agent skills, creativity and innovation, teamwork and communication.²³ His work^{9:118} provides a comprehensive competency-based framework. His model identifies three types of competencies required for successful inter-professional practice: 'common' competencies, that is, those which are required of all health professionals, 'complementary' competencies, those which relate to specific disciplines, and 'collaborative' competencies, those required for different professions to work effectively together. It is this last group of competencies which attract the most attention in relation to inter-professional practice, and include the ability to: describe one's roles and responsibilities clearly; recognise, observe and respect role constraints, responsibilities and competence of oneself, and other professionals; work with other professions for change and resolve conflict; work with others to assess, plan, provide and review care for clients; tolerate differences, misunderstandings and shortcomings in others; facilitate inter-professional case conferences and meetings; and to enter into interdependent relationships with other health professionals.

A recent publication has set out an alternative inter-professional capability framework. Developed by the Combined Universities Interprofessional Learning Unit (CUILU) in the UK, it is part of the UK government's push to advance the field of inter-professional learning. The framework sets out a collection of learning outcomes that students require in order to become 'capable' inter-professional workers. The capabilities are organised in four key domains: ethical practice, knowledge in practice, inter-professional working and reflection. Each domain has three to four capabilities, each relating to some aspect of working as an inter-professional team member.²⁴

The Institute of Medicine held a health professions summit in 2002, which followed their major reports highlighting the gaps in patient safety²⁵ and in the quality of health care services.²⁶ This work resulted in a report: *Health professions education: a bridge to quality*. This process identified a set of "... *five core competencies that all clinicians should possess, regardless of their discipline, to meet the needs of the 21st-century health system.*"^{27:3} Although the competencies are a work in progress, the ability to work in an interdisciplinary team is acknowledged as a core factor in the provision of care.

The competencies included:

- *provide patient-centred care* (identify, respect, and care about patients' differences, values, preferences, and expressed needs, relieve pain and suffering, coordinate continuous care, listen to, clearly inform, communicate with, and educate patients, share decision making and management; and continuously advocate disease prevention, wellness, and promotion of healthy lifestyles, including a focus on population health);
- *work in interdisciplinary teams* (cooperate, collaborate, communicate, and integrate care in teams to ensure that care is continuous and reliable);
- *employ evidence-based practice* (integrate best research with clinical expertise and patient values for optimum care, and participate in learning and research activities to the extent feasible);
- *apply quality improvement* (identify errors and hazards in care, understand and implement basic safety design principles, such as standardization and simplification; continually understand and measure quality of care in terms of structure, process, and outcomes in relation to patient and community needs, and design and test interventions to change processes and systems of care, with the objective of improving quality); and
- *utilize informatics* (communicate, manage knowledge, mitigate error, and support decision making using information technology).^{27:4}

4.1.2 Inherent inter-professional competencies

A report on professional associations in Canada failed to identify specifically defined inter-professional competencies in any of the accreditation standards of groups other than doctors.²⁸ However, professional and educational organisations often establish either tacit or implicit competencies for inter-professionalism when they write objectives or outcomes for their curricula.

A recent study by the Department of Human Services Victoria identified the competency standards (where available) for health professionals across Australia. The resulting document provides information on the key units of professional bodies' competency requirements. In Table 1 below, we have identified those competencies which relate to IPP.²⁹

The competencies effectively mirror those identified above. Core to effective IPP are the concepts of the ability to establish and maintain professional relationships (including the ability to deal ethically and with integrity and honesty, with colleagues and patients); the ability to communicate effectively in a range of contexts and with a variety of people; the competencies associated

with teamwork and collaboration; those associated with learning oneself, and the teaching of others; the ability to manage and lead teams and a broad category of professionalism which is associated with behaving in an appropriate professional manner. It is important to note in the case of some professions, their standards did not list an explicit unit or element for some topics (e.g. communication). This however, should not be read as those professions 'missing' that unit. In most cases these concepts, especially communication and professionalism, are embedded in the elements of the standards.

Table 1: Inter-professional competencies from professional bodies

	Interprofessional relations	Communication	Collaboration, Teamwork	Learning, Teaching	Management, Leadership	Professionalism
Intern(PGY1) & JMO(PGY 2-3)	✓		✓	✓		✓
Specialists		✓	✓	✓		✓
General practice				✓		
Intensive care/paediatric intensive care		✓		✓		
Obstetrics and gynaecology		✓	✓	✓	✓	✓
Occupational medicine		✓				
Palliative medicine		✓	✓			
Pathology		✓	✓	✓		
Public health medicine		✓				
Rehabilitation medicine				✓	✓	
Surgery		✓	✓	✓	✓	✓
Clinical psychologists	✓	✓				
Dietitians			✓			✓
Occupational therapists			✓	✓		✓
Occupational therapists (mental health)	✓		✓	✓		✓
Orthoptists				✓		
Pharmacists	✓					✓
Physiotherapists						✓
Podiatrist				✓		
Prosthetists/orthotists				✓		
Social workers – entry level	✓	✓				✓
Speech pathologists				✓		
Ambulance/paramedics		✓		✓	✓	
Critical care nursing	✓	✓	✓	✓	✓	
Division 2 nursing	✓		✓			

4.1.3 Embedded inter-professional competencies

Inherent in much of the literature on inter-professional learning and practice are the competencies required to achieve the outcomes desired (e.g. collaboration). Competencies are generally divided into the knowledge, skills and attitudes required to undertake a given task, or achieve a desired goal, although it is obvious that

many competencies (for example patient-centred practice) span categories.

One notable example of embedded inter-professional competencies are those developed by the University of Southampton, through their New Generation Project, a leading initiative on inter-professional learning. Here audiology, nursing, medical, midwifery, occupational therapy, physiotherapy, podiatry, pharmacy, radiography (therapeutic and diagnostic) and social work students have learnt 'with, from and about each other'. The competencies from this course are notable because they are the drivers of the educational process, rather than an outcome of it. The competencies are centred on inter-professional learning units of collaborative learning, inter-professional team working, enabling change in practice and inter-professional problem-solving.³⁰ Table 2 provides a sample of competencies either identified by the authors themselves, or inferred from their work.

Table 2: Competencies for inter-professional practice

Knowledge
<ul style="list-style-type: none"> Professional role boundaries^{31 30}
<ul style="list-style-type: none"> Learn about other team members expertise, background, knowledge, and values²⁷
<ul style="list-style-type: none"> Learn individual roles and processes required to work collaboratively^{27 30}
Skills
<ul style="list-style-type: none"> Group skills³¹
<ul style="list-style-type: none"> Communication skills^{27 31 32}
<ul style="list-style-type: none"> Conflict resolution skills^{27 31}
<ul style="list-style-type: none"> Leadership skills³¹
<ul style="list-style-type: none"> Collaborate with other professionals³⁰
<ul style="list-style-type: none"> Demonstrates basic group skills, including communication, negotiation, delegation, time management, and assessment of group dynamics^{27 30}
<ul style="list-style-type: none"> Ensures that accurate and timely information reaches those who need it at the appropriate time²⁷
<ul style="list-style-type: none"> Coordinates and integrates care processes to ensure excellence, continuity, and reliability of the care provided²⁷
<ul style="list-style-type: none"> Customises care and manage smooth transitions across settings and over time, even when the team members are in entirely different physical locations²⁷
Attitudes
<ul style="list-style-type: none"> Develop trust, and about the need for preplanning of roles²⁷
<ul style="list-style-type: none"> Deal with complexity and uncertainty³⁰
<ul style="list-style-type: none"> Respect, understand and support the roles of other professionals³⁰
<ul style="list-style-type: none"> Adaptive, flexible³²
<ul style="list-style-type: none"> Able and willing to share goals³²

4.2 Translating theory into practice

The ability of health professional students and new graduates to translate theory into practice remains a key problem in clinical education.³³ A related problem is the translation of research results into practice by practitioners, an issue which has gained momentum with the move toward evidence based practice.^{34 35}

A Canadian model, the 'cognitive apprenticeship model', has sought to address this issue by developing the '*... usually covert processes of cognition, meta-cognition and culture in the profession*'. The model is based on the principles of modelling, coaching, scaffolding, articulation, reflection and exploration (all standard adult learning principles) within the context of a situated (immersion) learning approach.^{36: 31} However, while the authors present the model as a situated approach to learning, and give the example of its use as a case study, they do not provide evidence of its effectiveness.

One aspect which was taken up by the Canadian model, that is the opportunity and ability to reflect, is a central dimension in both inter-professional learning, and inter-professional practice.³⁷ Given the complexity of the issues addressed in inter-professional learning, the potential impact on personal and professional identity and on 'tried and true' ways of working, the reflective practice approach appears to offer both the theory and methods to address the required personal, interpersonal and professional changes.³⁸ Providing learners with the conditions, skills and opportunities to develop their ability to reflect, within a safe learning environment, remains a challenge to educational institutions and service providers.³⁹

One of the most interesting developments in this field is the call for the development of a new framework for inter-professional practice. These writers argue that the full benefits of inter-professional practice are not yet being seen and that the next phase is the creation of new, fluid, and dynamic ways of working.⁴⁰

5. Conclusion

We have discussed issues drawn from the literature about inter-professional practice. If you have any comments on the issues canvassed in this discussion paper, please do not hesitate to contact us. Alternatively, you may wish to access the other discussion papers or companion documents, available from us or the ACT Health website [<http://www.health.act.gov.au/c/health>].

6. References

1. Gonczi A. Competency based learning: a dubious past - an assured future? In: Boud D, Garrick J, editors. *Understanding Learning at Work*. London: Routledge, 1999:180-195.
2. Carraccio C, Wolfsthal SD, Englander R, Ferentz K, Martin C. Shifting paradigms: from Flexner to competencies. *Academic Medicine* 2002;77(5):361-367.
3. Fordham AJ. Using a competency based approach in nurse education. *Nursing Standard* 2005;19(31):41-9.
4. Gwyther LP, Altilio T, Blacker S, Christ G, Csikai EL, Hooyman N, et al. Social work competencies in palliative and end-of-life care. *Journal of Social Work in End of Life & Palliative Care* 2005;1(1):89-122.
5. Baker DP, Salas E, King H, Battles J, Barach P. The role of teamwork in the professional education of physicians: current status and assessment recommendations.[see comment]. *Joint Commission Journal on Quality & Patient Safety* 2005;31(4):185-202.
6. Kneafsey R, Long A, Reid G, Hulme CI. Learning and performing care management: experiences of a newly formed interdisciplinary, assessment and rehabilitation team. *Learning in Health & Social Care* 2004;3(3):129-140.
7. Olson DK, Lohman WH, Brosseau LM, Fredrickson AL, McGovern PM, Gerberich SG, et al. Crosscutting competencies for occupational health and safety professionals. *Journal of Public Health Management & Practice* 2005;11(3):235-43.
8. Porta M, Trento M, Committee RW. ROMEO: rethink organization to improve education and outcomes. *Diabetic Medicine* 2004;21(6):644-5.
9. Barr H. Competent to collaborate: towards a competency-based model for interprofessional education. *Journal of Interprofessional Care* 1998;12(2):181-188.
10. McNair R. The case for educating health care students in professionalism as the core content of interprofessional education. *Medical Education* 2005;39(5):456-464.
11. Norris E, Alexander H, Livingston M, Woods K, Fischbacher M, MacDonald E. Multidisciplinary perspectives on core networking skills. A study of skills: And associated training needs, for professionals working in managed clinical networks. *Journal of Interprofessional Care Vol* 2005;19(2):156-163.
12. Johnson CE, Stewart AL, Brabeck MM, Huber VS, Rubin H. Interprofessional collaboration: Implications for combined-integrated doctoral training in professional psychology. [References]. *Journal of Clinical Psychology Vol* 2004;60(10):995-1010.
13. Freeth D, Reeves S. Learning to work together: using the presage, process, product (3P) model to highlight decisions and possibilities. [References]. *Journal of Interprofessional Care Vol* 2004;18(1):43-56.
14. Hager P, Gonczi A. What is competence? *Medical Teacher* 1996;18(1):15-18.
15. Whitcomb ME. More on competency-based education. *Academic Medicine* 2004;79(6):493-494.

16. Mansfield B. Competence and standards. In: Burke JW, editor. *Competency based education and training*. Lewes: Falmer Press, 1989.
17. Gonczi A. Re-conceptualising competency-based education and training : with particular reference to education for occupations in Australia. University of Technology, 1996.
18. Gonczi A, Hager P. Competency based education in the professions. In: Edwards R, Hanson A, Raggatt P, editors. *Boundaries of adult learning*. London: Routledge, 1996:246-261.
19. Stephenson KS, Peloquin SM, Richmond SA, Hinman MR, Christiansen CH. Changing educational paradigms to prepare allied health professionals for the 21st century. *Education for Health* 2002;15(1):37-49.
20. Halpern R, Lee MY, Boulter PR, Phillips RR. A synthesis of nine major reports on physicians' competencies for the emerging practice environment. *Academic Medicine* 2001;76(6):606-615.
21. Fossey E. Effective interdisciplinary teamwork: an occupational therapy perspective. *Australasian Psychiatry* 2001;9(3):232-235.
22. Oandasan I, D'Amour D, Zwarenstein M, Barker K, Purden M, Beaulieu MD, et al. *Interdisciplinary education for collaborative, patient-centred practice: research and findings report*. Ottawa: Health Canada, 2004.
23. Barr H. *Interprofessional education: today, yesterday and tomorrow*. UK: Learning and Teaching Support Network for Health Sciences & Practice, Centre for Health Sciences and Practice, 2003.
24. Walsh CL, Gordon MF, Marshall M, Wilson F, Hunt T. Interprofessional capability: a developing framework for interprofessional education. *Nurse Education in Practice* 2005;5:230-237.
25. Institute of Medicine. *To err is human: building a safer health system*. Washington: National Academy Press, 2000.
26. Institute of Medicine. *Crossing the quality chasm: a new health system for the 21st century*. Washington, DC: National Academies Press, 2001.
27. Greiner A, Knebel E, editors. *Health professions education: a bridge to quality*. Washington: National Academy Press, 2003.
28. D'Amour D, Beaulieu MD, San Martin Rodriguez L, Ferrada-Videla M. Key elements of collaborative practice & frameworks: conceptual basis for interdisciplinary practice. In: Oandasan I, D'Amour D, Zwarenstein M, Barker K, Purden M, Beaulieu MD, et al., editors. *Interdisciplinary education for collaborative, patient-centred practice: research and findings report*. Ottawa: Health Canada, 2004.
29. Department of Human Services (Victoria). *Competency standards for health and allied health professionals in Australia*. Melbourne: Department of Human Services, Victoria, 2005.
30. Humpris D. Multi-professional practice, interprofessional education: lessons and evidence for rural and remote Australia. *8th National Rural Health Conference Proceedings*: National Rural Health Alliance, 2005.
31. Hall P, Weaver L. Interdisciplinary education and teamwork: a long and winding road. *Medical Education* 2001;35(9):867-75.

32. Parsell G, Spalding R, Bligh J. Shared goals, shared learning: evaluation of a multiprofessional course for undergraduate students. *Medical Education* 1998;32:304-311.
33. Hill N, Wolf K, Bossetti B, Saddam A. Perception of Students in Supervised Practice. *Journal of the American Dietetic Association* 1997;97(9, Supplement 1):A34.
34. Pallen N, Timmins F. Research-based practice: myth or reality? A review of the barriers affecting research utilisation in practice. *Nurse Education in Practice* 2002;2(2):99.
35. Farquhar CM, Stryer D, Slutsky J. Translating research into practice: the future ahead. *International Journal for Quality in Health Care* 2002;14(3):233-249.
36. Taylor KL, Care WD. Nursing education as cognitive apprenticeship: a framework for clinical education. *Nurse Educator* 1991;24(4):31-36.
37. Wilshaw G, Bohannon N. Reflective practice and team teaching in mental health care. *Nursing Standard* 2003;17(50):33-7.
38. Schön DA. *The reflective practitioner: how professionals think in action*. New York: Basic Books, 2004.
39. Drinka TJK, Clark PG. *Health care teamwork: interdisciplinary practice and teaching*. Westport, CT.: Auburn House, 2000.
40. Buckingham CD, Adams A. Classifying clinical decision making: a unifying approach. *Journal of Advanced Nursing* 2000;32(4):981-89.