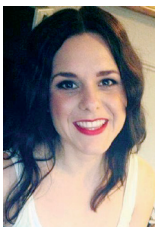


What's the evidence?

Translating interprofessional education and practice into the education and health care setting: The speech pathology perspective

Brooke Sanderson and Anne Whitworth



Brooke Sanderson (top) and Anne Whitworth

Political, social and population changes over recent decades have culminated in placing unprecedented pressures on health care systems globally (Institute of Medicine, 2001; Wagner et al., 2001; WHO, 2010), putting greater demands on already stretched health services and systems (WHO, 2010). Against this backdrop, the World Health Organization (WHO) reports that the human resources required to deliver health care are in crisis. In 2006, WHO estimated a worldwide shortage of almost 4.3 million health workers, a figure which was projected to grow (WHO, 2006). In response to this, governments “are looking for innovative, system-transforming solutions that will ensure the appropriate supply, mix and distribution of the health workforce” (WHO, 2010, p. 12). WHO, in its 2010 report, declared that one of the most promising solutions to this crisis is interprofessional collaboration. There is now wide acceptance that interprofessional collaboration, evidenced in a shift towards more cohesive practice where professionals come from different disciplines to work together to address clients’ health care needs, is critical to facilitate safe, effective and client-centred care (D’Amour & Oandasan, 2005; Goldberg, Koontz, Rogers & Brickell, 2012; Institute of Medicine, 2001; Reeves et al., 2009; Zwarenstein, Goldman & Reeves, 2009).

Policy and practice drivers in Australia

In line with global trends, drivers for health care reform in Australia are population growth, ageing population, burden of disease and shifting consumer expectations (National Health Workforce Taskforce, 2009). Compounding the situation are health workforce supply shortages and uneven geographical distribution of the workforce (McAllister, Paterson, Higgs, & Bithell, 2010; National Health Workforce Taskforce, 2009). As the Australian government has developed reform agendas to address the fore mentioned challenges, interprofessional collaboration (IPC), interprofessional education (IPE) and interprofessional practice (IPP) have emerged as key strategies to bring about necessary changes to health policy, systems and workforce (National Health Workforce Taskforce, 2009; Health Workforce Australia, 2011). See Table 1 for accepted definitions of these key terms.

Speech Pathology Australia (SPA) has responded to this, recognising IPP as a “critical component of competence for an entry-level speech pathologist” (SPA, 2011, p. 9). IPP has been incorporated into the accreditation standards for speech pathology education through its inclusion as a

range of practice principle (SPA, 2011); this current edition of *JCPSLP* is an excellent exemplar of SPA supporting IPP and supporting its members to implement it. As clinicians working in health care, however, how does all this activity and focus translate into our daily practice?

Table 1. Key definitions

Interprofessional learning (IPL)	“The overarching term encompassing interprofessional education and interprofessional practice. It is a philosophical stance, embracing lifelong learning, adult learning principles and an ongoing, active learning process, between different cultures and health care disciplines” (AIPEN, n.d., para. 3)
Interprofessional education (IPE)	“Occasions where two or more professions learn with, from and about each other to improve collaboration and the quality of care” (CAIPE, 2002)
Interprofessional practice (IPP)	“Occurs when all members of the health service delivery team participate in the team’s activities and rely on one another to accomplish common goals and improve health care delivery, thus improving patients’ quality experience” (AIPEN, n.d., para. 4) <i>Synonym = interprofessional collaboration (IPC)</i>
Multidisciplinary practice	“Multidisciplinary health professionals represent different health and social care professions – they may work closely with one another, but may not necessarily interact, collaborate or communicate effectively” (AIPEN, n.d., para. 9)

Clinical scenario

You are a clinician; you could be working in any setting, from a large metropolitan hospital or regional health service through to a primary school. You have recently moved into a new role as the manager of the department. As part of your induction to this role, you attended an interprofessional (IP) leadership course. Following the course, you read extensively about the evidence for IPP and now have a good understanding of how working in this manner could advance services and outcomes within your setting. Through this process, it has also become clear that although you work within a multidisciplinary team with other professionals, the team could be collaborating more to bring about true IPP. Further, the service model and environment do not appear conducive to collaborative practice, but rather reinforce a siloed approach to managing your clients. Every day you begin to see

examples where increased collaboration would lead to better outcomes but you are really not sure about the best way to translate your new knowledge into practice.

Response to the scenario

In the clinical scenario above, the challenge is not “What is the evidence for IPE and IPP?” but rather, “How does one practically implement this in the real world setting?” The evidence you have engaged with is convincing and coalesces perfectly with your own clinical judgment; the issue now is one of translation. You are standing on the precipice, perhaps even without knowing it, asking yourself how to implement service change to meet global and national health care recommendations that will help to bridge the divide between IP evidence and IP practice in Australia. The critical point to emerge, therefore, is *how the drive towards IPE and IPP is actually interpreted and applied such that it can be translated into the professional practice of speech pathologists.*

Searching the evidence

In order to help answer this question about translation into practice, a systematic search was conducted, sourced from the health databases: ScienceDirect, Medline, ProQuest and the database of Cochrane reviews. The search was conducted using the search terms: (speech patholog* OR speech language patholog*) AND (collaborative practice OR interprofessional practice OR interprofessional education) AND (translation OR outcome). Each search was limited to records in English from 2000 – current. Abstracts were reviewed to determine the publications’ relevance to the research question. The breadth of the search strategy was cross-checked using Google Scholar to confirm that all relevant records had been identified. The search revealed 19 key articles that directly addressed the question. Interestingly, most addressed the implementation of IPE within the university education context, with the search revealing few articles exploring IPE/IPP in the health care setting or the impact on client outcomes. Further, many of these studies do not

represent robust levels of evidence but report exploratory, descriptive studies as health care teams and academics focus on developing models of IP practice, many of which are still waiting to be rigorously tested.

In addition to the systematic search of the health databases, Google was used to identify literature from Australian and overseas stakeholder groups. It would seem that in almost no other area has so much work been done to synthesise the literature and make it available in such a digestible form. This does mean, however, that the sources of evidence in this field are broader than what we might usually perceive as evidence; taking us beyond the usual stack of journal articles to the ‘grey evidence’ including reports, policy documents and commissioned literature reviews. Nicol (2013), Siggins Miller Consultants (2012), Nisbet, Lee, Kumar, Thistlethwaite and Dunston (2011), WHO (2006) and WHO (2010) are select examples of these. This material is a good start point for clinicians keen to “dip their toe” into this literature, but who find themselves feeling overwhelmed by the barrier that the myriad of papers, encompassing the different disciplines’ cultures, perspectives and philosophies, can pose.

Clinical bottom line

The references set out in Table 2 list selected articles in the allied health literature that have reported on the translation of IPE into practice; not all of these involve speech pathology but the principles are viewed as applicable to our profession. A critically appraised evaluation of the study by McNair, Stone, Sims and Curtis (2005) is included in Table 3.

A thorough analysis of the literature yielded five key themes considered to be critical to driving the IP agenda forward, these are summarised in Table 4. These themes are further explored below, drawing out key practical strategies to facilitate successful translation of IPE and IPP into the workplace, providing the readership with ideas, resources and exemplars to assist them in overcoming the barriers to the implementation of IPE and IPP in their organisation.

Table 2: Articles that report on the translation of IPE into practice

Articles identified	Type/level of evidence	Summary
Copley, J. A., Allison, H. D., Hill, A. E., Moran, M. C., Tait, J. A., & Day, T. (2007). Making interprofessional education real: A university clinic model. <i>Australian Health Review</i> , 31(3) 351–357.	Descriptive study	Provides an overview of a series of innovative community-based IPE placement opportunities based on a model from the social work literature. Methods, experiences and challenges are discussed.
Morrison, S. C., Lincoln, M. A., & Reed, V. A. (2011). How experienced speech-language pathologists learn to work in teams. <i>International Journal of Speech-Language Pathology</i> , 13(4), 369–377.	Descriptive study	Outlines the result of a study exploring how practicing speech-language pathologists learned to work in teams. Outcomes revealed <i>teamwork training with other disciplines during university is important, supporting the integration of IPE within the curriculum.</i>
Reeves, D., Perrier, L., Goldman, J., Freeth, D. & Zwarenstein, M. (2013). Interprofessional education: Effects on professional practice and healthcare outcomes (update) (Review). <i>Cochrane Database of Systematic Reviews</i> , 3.	Level 1 – Systematic review	Presents the outcomes of a Cochrane review of 15 studies to assess the effectiveness of IPE intervention when compared to both professional-specific education and no education. Concludes with the need for more rigorous designs when evaluating IPE, larger sample sizes and the use of control groups.
Sommerfeldt, S. C., Barton, S. S., Stayko, P., Patterson, S. K., & Pimott, J. (2011). Creating interprofessional clinical learning units: Developing an acute-care model. <i>Nurse Education in Practice</i> , 11, 273–277.	Descriptive study	Outlines an IP clinical learning unit set up in acute care (IPCLU) in Canada, designed to enhance the student experience and improve patient outcomes. Full of practical strategies for facilitating collaborative activity in the acute care setting and beyond.
Smith, A., & Pilling, R. (2007) Allied health graduate program: Supporting the transition from student to professional in an interdisciplinary program. <i>Journal of Interprofessional Care</i> , 21(3), 265–276.	Level IV	Provides an account of a training program for new graduates in Victoria to facilitate the transition from student to professional. Methods, participant experiences and impacts for the health service are described.

Source: NH&MRC Levels of Evidence: http://www.nhmrc.gov.au/_files_nhmrc/file/publications/synopses/cp30.pdf

Table 3. Critically appraised article

Article purpose	To evaluate an IPE intervention for undergraduate nursing and allied health students in rural Victorian health settings. This study presents the model and expands on the evaluation methods.
Article citation	McNair, R., Stone, N., Sims, J., & Curtis, C. (2005). Australian evidence for interprofessional education contributing to effective teamwork preparation and interest in rural practice. <i>Journal of Interprofessional Care</i> , 19(6), 579–594.
Design	Quasi experimental design with pre- and post-questionnaires, and with 12-month follow-up. Statistical analysis was undertaken of the student sample and of self-report ratings of beliefs around IPE, knowledge and skills and attitudes.
Level of evidence	Level IV – Quantitative analysis of qualitative methodology without experimental control
Participants	91 third-year students from medicine, nursing, physiotherapy and pharmacy undertook the IPE placement and completed one or more of the questionnaires at the three time points (pre: 100%, post: 93% and at follow-up: 53%). Students were similarly distributed between urban and rural placements.
Intervention	The Rural Interprofessional Education (RIPE) intervention consisted of a two-week placement of mixed interprofessional groups of approx. 8–10 students incorporating a range of IPE categories. Students worked in small teams that encouraged shared goal-setting, observed a range of IP activities and engaged in an asynchronous on-line discussion forum that reflected on their IP experiences.
Results	Results are reported in three areas. 1) Learner's satisfaction: high levels of satisfaction were reported immediately and at 12 months post placement. Supervision from own and other professions were rated as equally effective. 2) Acquisition of competencies: knowledge and understanding of team roles improved, although respect for other professions and ratings of own knowledge reduced. No gender differences were seen. 3) Changes in IP behaviour: students perceived themselves as having significantly more active participation as a team member and were more confident towards IPP. 4) Intention to work rurally: this was high at pre- and post-time points, possibly reflecting initial interest in IP working, but declined at the 12-months follow-up (despite retained interest in IP).
Limitations	Students were self-selected and highly motivated, making them potentially non-representative of the main cohort and limiting generalisability. The absence of credit for the module may also have skewed recruitment. The sample size for the different professional groups restricted power and no control group was used to compare attitudes to IPE. The study involved students living and working together in a high level of immersion which may have influenced the positive findings. Supervision levels were also consistently high (1:1), along with high expectations and opportunities for reflection.
Summary	The IP experience was a highly positive experience for the students involved, reflecting their initial interest but also demonstrated high levels of satisfaction, knowledge, understanding and confidence in IP that was maintained at 12 months. The study was also viewed as successfully overcoming many logistical challenges and barriers that arise in implementing IPE placements across the curricula of multiple professions. The future challenge was viewed as extending the placement opportunity to more students.

Table 4. Themes identified as enablers to the translation of IPE and IPP

Shared understanding
Embedded interprofessional focus in all education and training
Cultural and organisational change
<ul style="list-style-type: none"> • The cultural shift • Structures to enable collaboration • Champions of change
Strategic partnerships and collaboration
Dissemination

Key themes

Shared understanding

One of the key themes to emerge was the lack of consensus in the terms used within the IP literature, where a wide range of terms are used with, at times, different interpretations. This brings into focus a very real challenge created by different education and health organisations using different terms – for example, IPL, IPP, IPE – leading to potential misunderstandings, team conflict, dysfunction and fragmentation (Stone, 2013). As clinicians, we need to therefore ensure that we understand each other by contextualising our language use, checking for meaning and paraphrasing to facilitate a shared understanding and form a foundation for dialogue and action (Stone, 2013).

Embedded interprofessional focus in all education and training

All health education courses prepare their students for professional health practice; this education can be thought

to have a significant bearing on the quality of the health system as a whole. The rationale for the IPE agenda is that learning together facilitates future working together (Thistlethwaite, 2012). Figure 1 details the interdependency of IPE, collaborative practice and client outcomes (D'Amour & Oandason, 2005). Barr and Brewer (2012) present three models for the development of IPE initiatives, these range from IPE within concurrent uniprofessional placements, within but external to concurrent clinical placements and within dedicated IP placements. Their chapter explores the resourcing, planning and implementation of this continuum of IP experiences (Barr & Brewer, 2012). There are numerous other examples of IPE initiatives within the allied health literature (Copley et al., 2007; McNair et al., 2005; Sommerfeldt, Barton, Stayko, Patterson & Pimott, 2011). While specific enablers to the development of IPE initiatives could be explored here, the theme that emerged from the literature is that it is not the development of IPE initiatives that is the main challenge, rather embedding and sustaining them (Matthews et al., 2011). Within this context, a cultural shift is identified as a key enabler to embedding IPE across Australia (Matthews et al., 2011).

Cultural and organisational change

The cultural shift

Organisational culture includes the values, beliefs and assumptions about the appropriate ways in which professionals think and behave within a particular organisation and as such, culture has a powerful influence in driving the IP agenda (Siggins Miller Consultants, 2012). The pedagogical shift from uni-professional or discipline-siloed education and practice and the systems that have

Interprofessional Education for Collaborative Patient-centred Practice: A Model

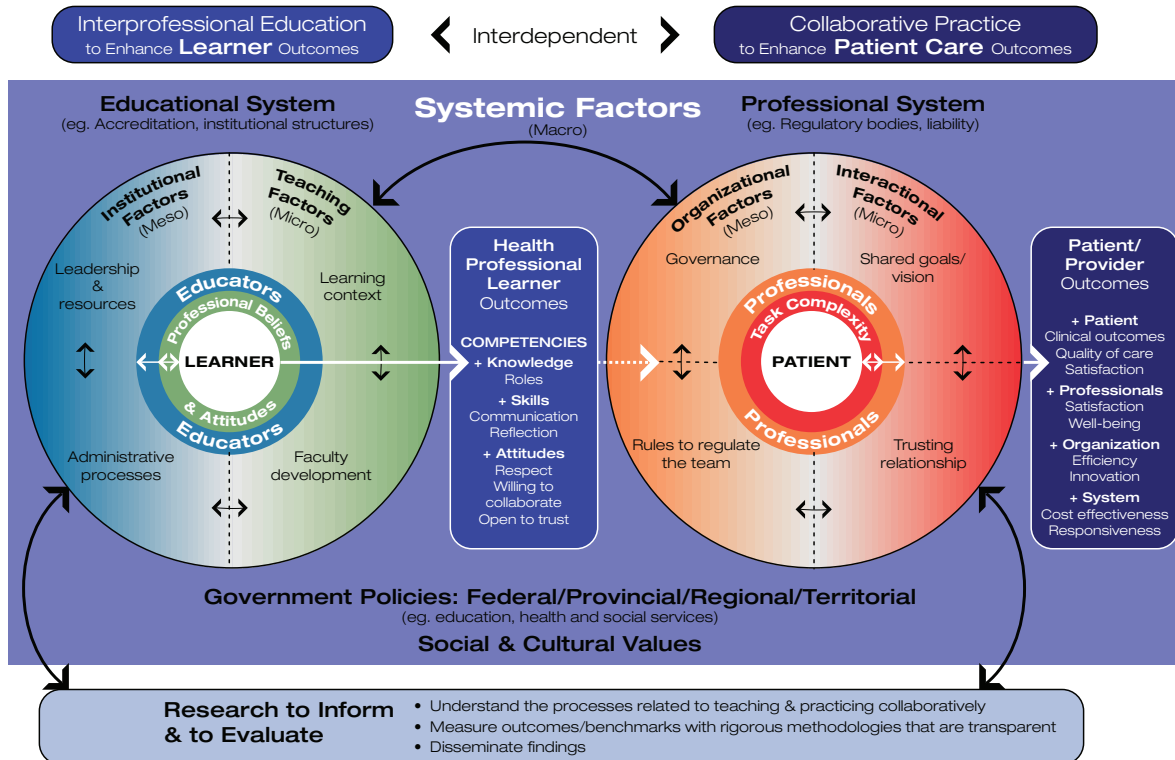


Figure 1. Interprofessional education for collaborative patient-centred practice: A model (D'Amour & Oandasan, 2005). Reproduced with permission of Ivy Oandasan.

been developed around this represent very real challenges to the translation of IPE and IPP (Goldberg et al., 2012). Ginsburg and Tregunno (2005) highlight a range of issues from the organisational change literature that are relevant to IP initiatives, providing a set of recommendations relevant to individual clinicians and managers. Parker, Jacobson, McGuire, Zorzi and Oandasan (2012) present the Interprofessional Collaborative Organisational Map and Preparedness Assessment (IP-COMPASS), a quality improvement framework that provides a process to support health care organisations to understand and analyse the attributes of organisational culture that can inhibit or conversely enable IPE. This can be used to help guide cultural transformation by bringing people together to engage in a conversation – this dialogue being vital and the first step in culture change.

Structures to enable collaboration

Another key theme to emerge was that policy and service changes are often necessary to facilitate the breakdown of structures (both physical and procedural) that inhibit collaboration. Stone (2006, p. 81) stated that advocacy is required “to bring interprofessional education (IPE) from the margins to the mainstream”. While IPE and IPP are now advocated for in national policy documents in Australia (National Health Workforce Taskforce, 2009; Health Workforce Australia, 2011), translation into the health industry is thought to be “in its infancy” (Priddis & Wells, 2011, p. 154). It is therefore argued that advocacy within services will be a key enabler to translating IPE and IPP and should be the focus of clinicians seeking to advocate for changes in their workplace.

Champions of change

The culture of an organisation is inherently linked to leadership and the values, beliefs and assumptions of its leaders (Siggins Miller Consultants, 2012). We are all responsible for progressing the IPE and IPP agenda within speech pathology and thus contribute to the broader agenda across health within Australia. We all have the capacity to impact change within our organisations, regardless of whether we hold formal leadership positions. This might be through developing and implementation a new IP initiative, sharing knowledge with colleagues or lobbying for changes that will enable collaborative, client-centred care within your setting. As clinicians we need the resources and alliances to achieve this; engaging in partnerships and disseminating best practice are key strategies which clinicians must engage to position themselves as *champions of change* and are explored as their own themes below.

Strategic partnerships and collaboration

As detailed in Figure 1, the interface between the education and health sectors is the linkage point for IPE and IPP (D'Amour & Oandasan, 2005). In this context, a key driver to change is strong collaboration between the education and health care sectors. There are many such partnerships reported across Australia (Nicol, 2013; The Interprofessional Curriculum Renewal Consortium Australia, 2013). The Office of Teaching and Learning (2012) funded project ‘Creating a collaborative practice environment which encourages sustainable interprofessional leadership, education and practice’ is an example of one such partnership. This cross-institutional project (Curtin University

and Charles Sturt University) develops cross-sectorial partnerships through the delivery of an IP leadership program for senior health staff, developing leadership and change management capacity of staff and thus building the capacity for IPE and IPP within the health care sector. Chesters and Murphy (2007) detail another such partnership, reporting how the ACT brought together educators, clinicians and government bodies to establish a strategic relationship to design and implement IPL at both the graduate level and the professional level in the ACT. Cross-sectorial relationships should also be strengthened through collaborative research (Matthews et al., 2011), which in turn addresses the need for further research in this field. As part of the HWA Clinical Training Reform (HWA, n.d.), Integrated Regional Clinical Training Networks (IRCTNs) have been developed across all Australian states to bring together individuals from the health, higher education and training sectors. These networks provide the opportunity for individual clinicians with a passion for clinical education and training to network and establish such cross-sectorial partnerships.

Dissemination

Outcomes of innovative IPE and IPP initiatives for the client, health workforce and health system as a whole need to be evaluated and disseminated; however, currently, there is limited research that systematically addresses these in the speech pathology field. Mathews et al. (2011) highlight the urgent need for further research to contribute to the evidence base for IPE and IPP. This sentiment is shared by Goldberg et al. (2012) who call for more rigorous studies into the multiple benefits of IPL. The Interprofessional Curriculum Renewal Consortium, Australia (2013) provides an overview of the evaluation framework regularly used in the IP literature. This framework can be used by clinicians to guide their program evaluation. Through the dissemination of good practice that overcomes historical constraints, clinicians can contribute to the body of literature in this area and individually contribute to this paradigm shift in health service delivery and workforce preparation.

Conclusion

This edition of "What's the evidence?" responded to a clinical scenario where a speech pathologist was not able to action IPP within their workplace. In this case, understanding the social, political and policy drivers towards IPE and IPP is not enough; clinicians need to know how to translate this call to action in the real world of speech pathology practice in Australia. To respond to the scenario, the column explored the evidence for the translation of IPE and IPP concepts and into practice in both the education and clinical practice settings. In doing so, the column draws out key themes identified to facilitate successful implementation of IPE and IPP in the workplace. Clinicians have an ethical responsibility to deliver services based on best evidence and as such, these strategies should be implemented by clinicians to contribute or lead to the implementation of IPE and IPP within their workplaces – be it the education, health, private or public sector.

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