Repositioning interprofessional education from the margins to the centre of Australian health professional education - what is required?

Abstract
This paper examines the implementation and implications of four development and research initiatives, collectively titled the Curriculum Renewal Studies program (CRS), occurring over a six year period ending in 2015, focusing on interprofessional education (IPE) within Australian pre-registration health professional education. It outlines the design of an innovative approach to national IPE governance and development. It comments on how ideas drawn from socio-cultural theories were used to guide our choice of methods and to enrich data analysis. Finally, the paper reflects on the implications of CRS findings for health professional education, workforce development and the future of Australian IPE.

Methodologically the CRS was developed as an action focused and participatory program of studies. The research utilised a mixed methods approach. Structured survey, interviews and extensive documentary analyses were supplemented by semi-structured interviews, focus groups, large group consultations and consensus building methods. Narrative accounts of participants' experiences and an approach to the future development of Australian IPE were developed.

Results were achieved in several areas. Detailed accounts of Australian IPE curricula and educational activity were developed. These accounts were published and used in several settings to support curriculum and national workforce development. Reflective activities engaging with the above data facilitated the development of a national approach to the future development of Australian IPE - a national approach focused on coordinated and collective governance and development.

What is known about this topic?
Interprofessional education to enable the achievement of interprofessional and collaborative practice (IPCP) capabilities is widely accepted and promoted. However, many problems exist in embedding and sustaining IPE as a system wide element of health professional education. How these implementation problems can be successfully addressed is a health service and education development priority.

What does this paper add?
The paper presents a summary of how Australian IPE was conceptualised, developed and delivered across twenty six universities during the period of the four studies. It points to strengths and limitations. An innovative approach to the future development of Australian IPE is presented. The importance of socio-cultural factors in the development of practitioner identity and practice development are identified.

What are the implications for practitioners, higher education and the health system?
The findings of the CRS present a challenging view of current Australian IPE activity and what will be required to meet industry and health workforce expectations related to the development of an Australian IPCP capable workforce. Whilst the directions identified pose considerable challenges for the higher education and health sectors, they also provide a

consensus based approach to the future development of Australian IPE. As such they can be used as a blue-print for national development.

Introduction – setting the scene

Interprofessional education (IPE) to enable the achievement of interprofessional and collaborative practice (IPCP.[1]) capabilities is widely accepted and promoted as essential to the delivery of effective and patient responsive health care and to the sustainability of health systems and services [1,2,,3]. However, many problems exist in embedding and sustaining IPE as a system wide element of health professional education. How these implementation problems can be successfully addressed is a health service and education development priority [4,5,6,7].

What is IPE and IPCP?

Box 1

Interprofessional education (IPE)

Interprofessional education is defined as [8]: *interprofessional* education as occasions when members or students of two or more professions learn with, from and about each other to improve collaboration and the quality of care and services.

One of the primary keys to effective interprofessional education is the engagement of students from different professions in interactive learning – something must be exchanged among and between learners from different professions that changes how they perceive themselves and others. These changes must positively affect clinical practice in a way that enhances interprofessional collaboration, client involvement in care, and ultimately improves health outcomes. IPE is a complex educational approach that is most effective when integrated throughout a program of study in both academic and practice learning as the student moves from simple to more complex learning activities [9]

Interprofessional collaborative practice (IPCP)

As outlined in the World Health Organization Framework for Action [2] interprofessional '*collaborative practice in health-care occurs when multiple health workers from different professional backgrounds provide comprehensive services by working with patients, their families, carers and communities to deliver the highest quality of care across settings*' (p. 13).

IPCP has a focus on learning to work together, and is serving to transform education and training systems [10] . In support of the IPCP momentum there is a growing literature advocating IPCP as a model that improves patient safety and the way in which patients and their carers experience their participation in the healthcare process [11,12, 13]. As a result of the above, IPCP, collaboration, partnerships, co-production, and team based care have become the service design and delivery contours of health policy, practice and reform.

[1] We have chosen to use the nomenclature of 'interprofessional and collaborative practice' (IPCP) instead of 'interprofessional practice' (IPP). Whilst IPP has been the historically preferred nomenclature, IPCP is the nomenclature currently used by the World Health Organization .

The contribution of this article

By drawing on the findings and recommendations of four Australian IPE development and research initiatives, known collectively as the Curriculum Renewal Studies (CRS) program, this article provides a contemporary view of how Australian IPE is being designed, implemented and developed, together with commentary on how Australian educators and key stakeholders suggest the challenges of embedding and sustaining IPE could be better addressed.

The investigative focus of the CRS (see questions below) was shaped by the findings of the first Australian IPE scoping study, The Way Forward [14], and the first IPE focused literature review engaging with what was known/not known about Australian IPE – its history, conceptualisation, design, delivery and impact [15]. A major outcome of the Way Forward study was to alert Australian bodies involved with health workforce development and health professional education as to how little was known about the place, development, strengths and limitations of IPE as this existed as part of Australian health professional curricula. Whilst each of the four CRS studies had their own knowledge development focus, the overarching aim of the CRS was to answer four questions:

1. How is Australian IPE experienced by the diverse groups involved with its design and implementation?
2. How is Australian IPE configured?
3. What is required to develop IPE as a central feature of Australian health professional education?
4. How are socio-cultural theories useful (or not) for progressing the development of Australian IPE?

The fourth question, with its focus on the utility of socio-cultural theories, was taken up because of its relevance to debates as to how best to facilitate change within complex human systems. Socio-cultural theories, for example, practice theory, cultural historical activity theory, with their focus on the social, cultural and contextual aspects of practice and education are increasingly argued as a more relevant and effective approach to enabling complex practice change in complex organisational settings, as compared to cognitive/behavioural theories that focus on practice, education and change as individual, cognitive and competency based activities and achievements [16, 17].

Answering the above questions would address major knowledge gaps in relation to Australian IPE and in doing this, provide a knowledge base to inform Australian higher education and health workforce development initiatives and policy. The scope of the CRS and the range of participants involved were drawn from a range of sectors and settings - higher education, health service provision, the health professions, peak bodies in health and safety, government workforce bodies and bodies representing consumers and students. Human research ethics approvals were obtained for all studies. The CRS was funded by two national bodies, the Office for Teaching and Learning (now incorporated in the

Commonwealth Department of Education and Training), and Health Workforce Australia, a state body, the Western Australian Department of Health.

The CRS team

The CRS team comprised a group of experienced and senior educators, researchers and health professionals, all with considerable experience in IPE, drawn from nine universities and two other partner organisations.

We begin with a brief description of the aims and focus of each study.

Study 1: Interprofessional Education: National Audit Study (NAS)[18]

The NAS was funded by Australia's peak national health workforce development body, Health Workforce Australia, to develop a national profile of how IPE was designed and delivered across twenty-six Australian universities between 2011 and 2013. It was the first Australian study to provide a detailed account of Australian IPE curriculum and educational practice. Its knowledge development focus was a response to data deficits identified in the Way Forward report. Data development was structured in relation to key curriculum elements. A structured survey approach to data collection was utilised. Open text opportunities were also provided. The study provided a national report structured by curriculum elements and available as a part of a national health workforce series.

Study 2: Interprofessional Education for Health Professionals in Western Australia: perspectives and activity (WAS) [19]

This study was funded by Western Australia Health. It was designed as an ethnographic and narrative study that would complement and add to the survey data approach of the NAS. Whereas the NAS was, to a large degree quantitative in its collection methods and representations, the Western Australian study was open ended, narrative focused and interpretive. The study examined cultural, logistical and strategic factors as they impacted on the development and delivery of IPE in Western Australia. Our aim was to understand the dynamics and challenges involved in the development of IPE curriculla. Given our interest in examining the social and cultural dimensions of change, the data gathered by this study was of particular interest.

Study 3: Curriculum Renewal for Interprofessional Education in Health (CRIEH) [1]

This study built on the data from the NAS and WAS aiming to produce an overarching analysis of IPE in Australia and an approach to its future development. The CRIEH study identified and categorised a wide range of national and global educational and curriculum resources. Developing a curriculum framework responsive to IPE was a major outcome [14]. Its focus and deliverables were developed as a response to what many educators described as a lack of knowledge about what resources existed and how such resources might be accessed[1,]. Structured questions were used in survey type formats to gather detailed data. Open text

options were always included. Case study exemplars of Australian IPE activity were invited. Like the NAS and WAS, the final report identified a number of national development recommendations.

Study 4: Curriculum Renewal for Interprofessional Education in Health: Establishing Leadership and Capacity (ELC) [20]

The fourth study focused on how what had been learned from studies 1-3 could be used to progress the development of Australian IPE. This work was taken forward through the conduct of national and state consultations. The study involved a re-engagement with the organisations and, where possible, individuals who had been involved in earlier studies. The methods focus involved verification activities – had the various studies captured the range of views that had been expressed? Importantly, the ELC also conducted two consultative fora – one a national event, the other located in Western Australia – aimed at establishing a consensus on national IPE development. This work was referenced to the recommendations of earlier CRS studies[1,].

Theory and methodology

The CRS involved mixed methods data collection and analysis. Whilst each of the four studies had their own knowledge and development aims and methods, for example, the quantitative/descriptive focus of the NAS, and the ethnographic/narrative focus of the WAS, the underpinning theoretical and methodological framing of all studies was 'socio-cultural'.

Socio-cultural theories, as distinguished from cognitivist and behavioural theories, draw attention to the importance of cultural, social, relational and material factors in the development of practitioner identity, practice learning and change[16 17,,] Paying attention to these factors as one focus in our data gathering resonated with many of CRS participants. It also resonated with much that has been written about the challenge of embedding and sustaining IPE. Paying attention to the development of IPE as a situated, cultural, social and relational accomplishment, as well as a cognitive accomplishment, would, we hypothesised, enable us to elicit more specific and situated accounts of how participants experienced and made sense of IPE within their own work context.

We endeavoured to gather, organise, verify and learn from significant amounts of data that represented IPE activity across twenty-six universities. Two national surveys were conducted, with extensive follow-up to clarify and verify data. Survey questions were piloted and feedback utilised. One survey was distributed to all relevant Australian universities. Whilst the survey was highly structured wherever possible we also included open text options. A second survey was constructed seeking comments from relevant stakeholder bodies – policy bodies, the professions, health workforce development bodies, that had some involvement with the implications of how IPE was taught. These two data sets provided much of the content for the NAS report.

We were also particularly concerned to gather detailed narrative and interpretative accounts of how participants from different sectors experienced their involvement with Australian IPE and viewed the place of, challenges to, and possibilities for IPE. Extensive semi-structured interviews, focus groups and consultations were conducted to develop these accounts. The various accounts were reviewed by one of several management team member groups established to take charge of data analysis and thematic writing. The WAS developed a more in-depth approach with semi-structured interviews being the point of departure for further in-depth interviews. Extensive use was made of documentary. Wherever meaningful, a comparative analysis with non-Australian data and literature was undertaken.

Findings

Findings are presented in relation to the four questions noted in the introduction

How is Australian IPE experienced by those involved with its development?

Data referred to in answering this question was drawn from thematic analysis of semi-structured interviews, focus groups and large group consultations undertaken as part of the NAS, WAS and CRIEH. Data was also drawn from two workshops run as part of the NAS and WAS that focused on 'scenario planning' methods [21]

Diverse, local and ad hoc, are terms that capture well how Australian educators reported their experiences with Australian IPE. Whilst local responsiveness was identified as important in developing IPE curricula, it was also identified as leaving the development of IPE vulnerable to changes in organisational support and in the individuals committed to it. Many participants described IPE as existing on the margins of curricula, with the sense of being a discretionary rather than required and structurally-embedded element of the curriculum. Difficulties in achieving adequate curricular space and a paucity of resources was identified as posing problems for what was often seen as a more intensive and resource demanding pedagogy. IPE was perceived to be far less well documented and published than other aspects of health professional education[1].

How is Australian IPE configured?

This section provides a brief overview of what we learned about how Australian IPE was developed, delivered and assessed. For the most part it draws on the structured data from three surveys, two focusing on the development of curriculum and one focusing on the use of curriculum models and resources. Comments made in relation to 'accreditation and knowledge development' are referenced to data gathered from semi structured interviews, focus groups and consultations held as part of the NAS, WAS and CRIEH.

IPCP Competencies

Arguably the point of departure for curriculum development is the specification of competencies or capabilities as the expected outcomes of the education process. Two things stand out. Firstly, there is considerable diversity in how competencies were described. Secondly, there were a substantial number of survey responses, in particular, in the NAS, where specific competencies, or any learning outcomes, were not identified at all.

Figure 1 Graph Finding 2, page 31, Report CRIEH

Despite the diversity, there were also commonalities across the stated competencies and learning outcomes when these were defined, namely: 'communicating'; 'operating within scope of own practice', 'knowing when to refer', 'collaborating' and 'working well in a team'. These competencies also align well with the outcome areas identified by the recent international consensus process on the assessment of interprofessional learning outcomes.[2]

Teaching and Learning

Diversity was also a defining characteristic of what was reported in relation to teaching and learning. The NAS mapped: teaching methods, sites of delivery, disciplines involved, number of participants per activity, level/phase, staff or consumer involvement, timing and duration and assessment.

Graphs Findings 3, 4, 6 and 8 – pages 43 – 44 and 47 – report CRIEH
Figures 2, 3,4 and 5

Respondents were unclear about whether it is preferable to allow a disciplinary identity to be formed prior to asking students to engage with other health professional students, or whether professional identity and competence can be formed alongside a recognition of and ability to work interprofessionally. What was also noticeable, and an important focus for future development, was the lack of familiarity with literatures that explore the pedagogies and educational methods that are required to generate systematic programs of interprofessional learning[1].

Assessment and Evaluation

The provisional nature of assessment and evaluation data in relation to IPE was consistently identified as problematic to the further development and credibility of IPE. Drawing on NAS data, we found that only 59% of the IPE activities reported were assessed, with 54% of those including assessment of teamwork.

Graph Findings 16 and 17, pages 58 and 59 CRIEH
Figures 6 and 7

Evaluation of effectiveness was predominantly based on the Kirkpatrick and Kirkpatrick[21] and the Joint Evaluation Team approaches to evaluation[22, 23]. The under-developed state of conceptualisation and methodology in both these areas is indicative of the challenge that IPE presents to more traditional methods of assessment and evaluation.

What is required to develop IPE as a central feature of Australian health professional education?

Each of the CRS studies contributed to answering this question. The ELC, in particular, was designed to focus on overall learning, overall directions and how such directions might be best communicated and implemented. The need for interlinked development in six areas was identified.

Firstly, the need for an inclusive and ongoing structure and process to provide national IPE leadership across higher education, health, the professions and government was identified. Secondly, the development of a nationally coordinated approach to building IPE curriculum and related faculty capacity was identified. This development would address an issue consistently raised by CRS participants, the lack of consistency in how IPE was being developed as part of local curricula. Thirdly, the need to incorporate IPCP standards and interprofessional learning outcomes into the accreditation standards of all Australian health professions. This step was consistently argued as essential to shifting the status of IPE from discretionary to required. Fourthly, to establish an Australian knowledge development agenda and process. CRS participants recognised the ongoing difficulty that deficits in research and evidence pose for the credibility and further development of IPE/IPP. Fifthly, there was a strong consensus as to the need for a well-developed approach to organising, and disseminating knowledge about IPE/IPCP in general, and about Australian IPE/IPCP in particular. Finally, CRS participants identified the need for a 'national IPE workplan'. The use and further development of a national IPE workplan was conceived as a way of coordinating and prioritising development across all areas as noted above. Importantly, CRS participants also argued for the development of IPE not as a stand-alone field, but as an inclusive, collegial, participatory and national endeavour that would focus on a collective and boundary crossing approach to interprofessional and collaborative education and practice[14].

How are socio-cultural theories useful (or not) for progressing the development of Australian IPE?

What was striking about much of what was presented by CRS participants was its social and cultural nature. The current positioning of Australian IPE was frequently discussed in terms of the privileging of uni-professional as compared to interprofessional models. Discussions of pedagogy and curriculum ran in tandem with discussions about power, influence and status.

CRS participants argued that whilst policy statements as to the importance of IPE were necessary for progressing IPE, they were not sufficient. What mattered was how local and national politics played out. The development of IPE was seen in terms of its dependency on the views and actions of other professions. How these professions, medicine in particular, viewed IPE would, it was argued, determine the future of Australian IPE. In a more personal, social and cultural sense IPE educators felt little agency and little power. The further development of IPE was often experienced as opportunistic and dependent on the good will of others, rather than being a planned, required and referenced to national standards. Our openness and interest in the social, political and cultural aspects of education, practice and change not only allowed us to elicit information in these areas, but also allowed us to work with and contribute concepts about education and practice as negotiated and contested cultural formations. These ideas resonated with CRS participants.

Discussion

What should we take from the findings of the CRS?

Firstly, that there is a major disjunction between what is being required of Australian IPE and what CRS participants indicated was currently possible. The implications of this disjunction for national health workforce strategy is highly problematic.

Secondly, Australian IPE has existed and been developed as a local process, not well embedded in the curriculum, subject to start/stop cycles of activity and dependant on institutional preferences and the commitment of IPE champions. This high level of dependency and vulnerability is constraining, and, for many IPE educators, immensely frustrating. These observations are not meant to suggest that there are not productive and creative examples of Australian IPE occurring, on the contrary, many positive things were reported. The problem is, however, that the further development of IPE is dependent on and constrained by many factors outside its control. A continuation of historical patterns would leave those involved with Australian IPE experiencing little agency, little influence and minimal ability to shape a nationally coherent and coordinated future.

Thirdly, although rarely discussed in terms of national choices, CRS participants reiterated that maintaining the existing approach to Australian IPE could not deliver a coherent, coordinated and system wide approach to graduating a health workforce with well-developed IPCP capabilities. If this view is correct, what is required at the national and local levels is a radically different approach to what has previously occurred. Whilst there appears in-principle support across all levels of higher education and health for a national and well-coordinated approach to the development of IPE, this commitment has not been translated into action in ways that are commensurate with what those involved with Australian IPE identified as required.

Finally, and importantly for addressing what will be required to grow and sustain Australian IPE, the CRS process has produced the design specifications for what is widely agreed as required to shift the status, position and possibilities of Australian IPE. What is important, we would argue critical, about what has been identified, is that it draws attention to the need for not only information, for example, curriculum development resources, exemplars – but, more

importantly, for the establishment of the kind of national structures, processes and development opportunities associated with the ongoing development of professions and fields of knowledge. CRS participants identified that what was missing and needed were - structures and processes that connect and cohere; opportunities for the development of identity and shared learning; the experience of participating in a community of practice related to a discrete field of knowledge and practice[16]; and in terms of legitimacy and credibility, inclusion within the national accreditation system. Without a national and cross-sector commitment to creating the above conditions it is hard to see how IPE, and its outcome, IPCP, will be able shift its position from the periphery to the centre of Australian health professional education and practice.

Conclusion

The CRS program has provided a unique opportunity to engage with, represent and reflect on the history and future, possible futures, for Australian IPE. The use of mixed methods and socio-cultural theorising have enabled the CRS to provide a range of perspectives on Australian IPE. What seems clear is that Australian IPE, as it is currently configured, has little chance of providing the kind of systemic and sustained approach to graduating a national workforce with well-developed IPCP capabilities. What is also clear, is that significant developments in IPE will require not only a system wide preparedness to take on new ways of thinking about practice and education, but, critically, will require the kinds of investment in structures, processes and opportunities identified by CRS participants.

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