

**INTERPROFESSIONAL EDUCATION:
HIGHER EDUCATION HEALTH PROFESSIONAL
ATTITUDES, BARRIERS AND ENABLERS**

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ABSTRACT

Health care systems are constantly under pressure to deliver more efficient and effective health care and improve patient outcomes. Interprofessional education (IPE) is seen as a vehicle through which to educate current and future health professionals to meet changing healthcare demands and improve health care delivery. The transformation in health pedagogy from a historical single discipline ‘silo’ approach to an interprofessional approach is complex and requires collaboration and commitment *within* and *between* various stakeholders including higher education institutions and health professional groups. The complexity associated with health system change creates unique challenges. This study explores the challenges to successfully implementing IPE within higher education health professional education in the Australian Capital Territory (ACT) through an in-depth investigation of staff attitudes towards and the barriers and enablers to IPE adoption.

A mixed methods approach was undertaken throughout three empirical research stages: focus groups (Stage 1, Chapter 4); a case study analysis (Stage 2, Chapter 5); and, a survey (Stage 3, Chapter 6) of health education professionals in the ACT. Thematic analysis and statistical tests including basic frequency, ANOVA, MANOVA and Bonferroni were used to analyse the quantitative and qualitative data sets, respectively. Participants involved in the study were from three health professional groups: allied health, nursing and midwifery and medicine; and four higher education institutions: Australian National University, Australian Catholic University, Canberra Institute of Technology and the University of Canberra within the ACT. The mixed method approach allowed the triangulation of data collection and data analysis tools.

Staff attitudes towards IPE have a significant influence on the successful implementation of IPE within health professional curricula. Overall, the study found that ACT staff attitudes to IPE were favourable. There were, however, differences in attitudes not only *between* each health professional group, but also *between* the higher

education institutions, and between single health professional groups *within* each higher education institution.

The identification of barriers and enablers to IPE play a significant role in the successful pedagogical change in health professional curricula. Attributing barrier and enablers to areas of responsibility enables a deeper understanding of the complexities of IPE. This research found that barriers and enablers are specific to stakeholder levels: *Government and Organisation; Institution;* and, *Individual*. Interactions *within* and *between* these three levels create complex tensions and synergies that hinder or enhance the embedding of IPE. These interactions, however, are dynamic and were shown to change across the three research stages, health professional group and higher education institution in areas such as: funding availability; restrictions imposed by professional associations; structure of health professional curricula; scheduling of clinical placements; and, staff and student involvement in IPE activities. Some of these factors have a dual role and can be both a barrier and an enabler. The varying degrees of interaction and dynamic nature of factors are captured within an IPE Higher Education Interactional Model developed from the findings of this study. In addition to developing a new model, this study compiled a unique list of enabling factors to IPE.

In summary, the mixed methods approach, the developed survey, the Tertiary (health) Sector Acceptance of Interprofessional Learning Survey (TAILS), and the IPE Higher Education Interactional Model in this thesis provides a comprehensive means by which to explore the factors influencing IPE implementation and sustainability in the higher educational health sector. The methodology and tools derived can be adopted and adapted for use in other health care settings, different geographical locations and for capturing the changing relationships over time between stakeholders.

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GLOSSARY OF ABBREVIATIONS

ACU	Australian Catholic University
ACT	Australian Capital Territory
AH	Allied Health
AIPPEN	Australasian Interprofessional Practice and Education Network
ANU	Australian National University
ARHEN	Australian Rural Health Education Network
ARMS	ANU Rural Medical Society
CAIPE	Centre for the Advancement of Interprofessional Education
CCGR	Centre for Clinical Governance Research in Health
CIHC	Canadian Interprofessional Health Collaborative
CIT	Canberra Institute of Technology
COAG	Council of Australian Governments
CP	Collaborative Practice
CRANC	Canberra Rural Allied Health Nursing Collective
EIPEN	European Interprofessional Education Network
IECPCP	Canadian Interdisciplinary Education for Collaborative Patient-Centred Practice
InterEd	Interprofessional Association for Interprofessional Education and Collaborative Practice
IPE	Interprofessional education
IPE-CP	Interprofessional education-Collaborative practice
IPL	Interprofessional learning
IPP	Interprofessional practice
JIPWEN	Japan Interprofessional Working and Education Network
L-TIPP	Learning and Teaching for Interprofessional Practice (Australia)
N&M	Nursing and Midwifery
NIPNET	Nordic Interprofessional Network
NRHSN	National Rural Health Student Network
OECD	Organisation for Economic Co-operation and Development

PBL	Problem-based learning
PG	Postgraduate
RIPE	Rural Interprofessional Education project
RIPEN	Rural Interprofessional Education Network
UC	University of Canberra
UG	Undergraduate
UK	United Kingdom
UNSW	University of New South Wales
US	United States
USA	United States of America
WHO	World Health Organisation

GLOSSARY OF KEY TERMS

Term	Definition
Allied health	Allied health is an umbrella term to describe tertiary qualified health professionals that provide mainstream health care and includes members from the following professions: nutrition and dietetics, occupational therapy, pharmacy, physiotherapy, psychology, social work and speech pathology (Lowe, Adam & O'Kane, 2007).
Attitude	A disposition or ability to evaluate an object, individual, person, group, idea and make a favourable or unfavourable judgement (Ajzen, 2001).
Barrier	An obstacle or a negative factor that impedes the delivery, implementation and sustainability of IPE.
Community in Context project	An IPE project undertaken by students attending the IPE-Rural programs. The project involves students, in interprofessional groups, investigating the health issues related to a specific target group within a rural location.
Enabler	A positive factor that enhances and promotes the delivery, implementation and/or sustainability of IPE.
Factor	A barrier or enabler to IPE.

Government and Organisation (theme)	This theme identifies the top-level stakeholders that influence the incorporation of IPE into higher education health professional degree programs, such as government organisations and accreditation boards.
Health professional	An individual who had completed tertiary education in a health field, such as: nursing and midwifery, nutrition and dietetics, medicine, occupational therapy, pharmacy, physiotherapy, psychology, social work or speech pathology.
Health professional education/curriculum	Objectives, learning outcomes, content, assessment and activities that facilitate learning (Freeth, Hammick, Reeves, Koppel & Barr, 2005) in a specific program or in the case of this research, a health profession.
Higher education institution	“A higher education institution is a body that is established or recognised by the Commonwealth or a state or territory government to issue qualifications in the higher education sector. It may be a university, self-accrediting institution or non-self-accrediting institution” (Australian Qualifications Framework Council, 2011 p. 93).
Individual (theme)	This theme identifies the factors relating to the involvement of individual staff and students in IPE.
Institution (theme)	This theme refers to the areas or factors within a higher education institution that influence the embedding of IPE into the health professional education, for example health professional curriculum and clinical placements.

Interprofessional education	Occurs “when two or more professions learn, with, from and about each other to improve collaboration and the quality of care” (CAIPE, 2002 p. 1). In the literature a number of terms are used interchangeably to describe or refer to IPE, these include: interprofessional learning (IPL), interdisciplinary learning/education, multiprofessional learning/education and multidisciplinary learning/education. To ensure consistent terminology throughout the thesis the term IPE has been used.
IPE-Rural initiative	Encompasses all iterations within the initiative between the ANU and UC where students from both institutions undertook activities together in a rural setting, for example, both the 2007 and 2008 IPE-Rural programs.
IPE-Rural program	Each iteration within the IPE-Rural initiative is referred to as a ‘program’, that is, the 2007 IPE-Rural program.
Mixed methods research	Focuses on collecting, analysing and mixing both quantitative and qualitative data in a single study or series of studies. “Its central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone” (Creswell & Plano Clark, 2007 p. 5).
Stakeholder	Government, organisation, community, group and/or individual who have an interest in, knowledge about, and/or an impact on IPE.

IPE HIGHER EDUCATIONAL INTERACTIONAL MODEL CODES

Code	Definition
A	Factor or area common to all stakeholder levels
B	Factor common <i>between</i> two stakeholder levels
C	Factor that is specific to a single stakeholder level
D	Identifies a tension <i>between</i> two stakeholder levels and represents a deeper understanding of factors identified by B
E	Identifies a synergy <i>between</i> two stakeholder levels and represents a deeper understanding of factors identified by B
F	Indicates a factor as a barrier or an enabler
G	Expands upon 'B' – identifies a tension or synergy <i>between</i> higher education institutions
✓	Factor that is under the responsibility of, or is driven by, a stakeholder level
x	Factor that is found to impact on, or common to another stakeholder level