Interprofessional Education: How Can We Understand It to Improve Our Practice?

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Objectives for Today

Together we will:

- Explore current conceptual approaches to understanding IPE
- Consider their strengths and weaknesses
- Consider additional theoretical approaches
- Consider implications for practice and research
A Global Rationale for IPE and Collaborative Process

Need for a collaboratively-prepared workforce

Examples include:
- Family and Community Health
- Health Action in Crisis
- HIV/AIDS, TB and Malaria
- Non-Communicable Diseases
- Mental Health  
Interprofessional education occurs when students from two or more professions learn about, from and with each other to enable effective collaboration and to improve health-care outcomes

(WHO, 2010)
Definition: Collaborative Practice

Collaborative practice happens when multiple health workers from different professional backgrounds work together with patients, families, carers and communities to deliver the highest quality of care.

(Interprofessional Education Collaborative, 2011a)
What are the Competencies Required for Interprofessional Practice?
Barr’s (1998) Three Types of Professional Competencies

(Interprofessional Education Collaborative, 2011a)
Competencies for IPE Collaborative Practice

- Values and ethics for interprofessional practice
- Roles and responsibilities for collaborative practice
- Interprofessional communication
- Interprofessional teamwork and team-based care

(Interprofessional Education Collaborative, 2011)
Team-Based Competencies: Advancing IPE Collaboration in Education and Practice

1. Communicate and disseminate
2. Develop interprofessional faculty and resources
3. Strengthen metrics and research
4. Develop new collaborative academic practice and new collaborations with community learning sites
5. Advance policy changes

(Interprofessional Education Collaborative, 2011)
Kirkpatrick’s Levels of Outcomes (Adapted)

1. Evaluation of reaction

2a. Modification of attitudes, perceptions

2b. Acquisition of knowledge, skills

3. Behavioural change

4a. Change in organizational practice

4b. Benefits to learners/patients

(Freeth et al. 2002)
BEME Review

Presage     Process     Product

Context

Teacher Characteristics

Approaches to Teaching & Learning

Collaborative Competencies

Learner Characteristics

(Hammick et al., 2007)
What is the Role of Theory in IPE?

Calls for Theoretical Perspectives:

- To understand what aspects of IPE work and how they work
- To guide design of IPE
- To guide and interpret evaluations of outcomes

(Lees and Meyer, 2011)
Understanding IPE: Theoretical Approaches

- Social psychology
- Reflective practice
- Situated learning
- Complexity theory

(Sargeant, 2009)
Understanding IPE: Theoretical Approaches

Theories directed at

- Preparing people to practice
- Cultivating collaboration
- Improving the quality of service and teams

(Reeves & Goldman, 2011)
Learning Theories and Their Utility in IPE: Where Do They Lead?

Behaviourist

- Outcomes-based curricula
- Competencies
- Evaluation in a framework like Kirkpatrick
- To date, mainly self report of outcomes

(Hean et al., 2009)
IPE Theories: Where Do They Lead?

- Constructivist

Fig. 2 Branches of constructivism that have been utilized with interprofessional education

(Hean et al., 2009)
Adult Learning Principles

• A collection of pedagogical approaches:
  • Self-direction
  • Reflection
  • Experiential learning
  • Enquiry-based learning

Adult learning theory as a “context”

(Mann, Dornan and Teunissen, 2010)
What Theories have Been Privileged?

Those that:

- are practical and visible
- follow uni-professional models
- favour ‘acquisition’
- are congruent with value of autonomy (or other current values)
- focus on individual learning
- view context as stable, rather than dynamic
- focus on competencies rather than identity
Problematizing IPE and practice

- Competency frameworks
- Concept of a “team”
- Collaborative patient-centred care

(Reeves, 2010)
What Additional Goals are Important for IPE?

Learners will:

- Participate in co-producing knowledge through dialogue and practice
- Access distributed knowledge and skills across a community and its common artifacts
- Develop an interprofessional identity
What Theories Have Been Underused?

Theories that view learning:
- At the macro level
- As both an individual and a collective enterprise
- As developing professional identity

Those that emphasize ‘participation’

Those that see systems as unstable, dynamic, complex
- Communities of practice
- Activity theory
- Expansive learning
Theories are Needed to Provide a Framework to Explore:

- Socio-cultural and demographic context
- The role of mediation of our learning
- Differential power and status
- How professionals come to share ownership of IPE
Learning Theories at a Micro and Macro Level

Fig. 4 Learning theories used in interprofessional education at a macro and micro level of analysis.

(Hean et al., 2009 p. 258)
Social Constructivism

- Learning is not purely individually constructed
- Learning is mediated by environment
- Social encounters influence learners’ meanings and understanding
- Learners construct new meaning collaboratively
- Learning is mediated through tools and artifacts
Communities of Practice

Learning occurs when people participate in the practices of social communities and construct identities in relation to them.

Communities are characterized by mutual engagement, mutual relationships, negotiated enterprise, shared repertoire and boundaries with the rest of the world.

(Wenger, 1998)
Learning in Communities of Practice

Meaning: Learning as a meaningful experience

Practice: Learning as doing

Participation: Learning as belonging

Identity: Learning as becoming

(Wenger, 1998)
Learning Architecture: Dualities and Dimensions

- Participation/reification
- Designed/emergent
- Local/global
- Identification/negotiability

(Wenger, 1998)
Learning Design

Learning Processes:

- Engagement
- Imagination
- Alignment

(Wenger, 1998)
What Would IPE Look Like?

- **Engagement**: opportunities to engage in joint activities, build and use existing knowledge, foster commitment.
- **Imagination**: a chance to reflect on self, others and situations anew
- **Alignment**: overcoming differences in perspective to address significant issues

Features of IPE pedagogy that foster learning

- Small group learning
- Action planning
- Facilitation
- Continued independent learning
- Safe environment

(Lees and Meyer, 2011)
Activity Theory

A socially distributed activity system in which individuals and groups are involved

- Collective learning and human activity
- Rooted in Vygotsky’s idea of learning as mediated.
- Tools are created that carry on, and new tools and knowledge are developed as a result of the activity.
- Knowledge is generated in interactions at both individual and collective levels

(Engstrom, 2004)
Fig. 1  A complex activity system.

(Payler et al., 2007; p. 164)
AN IPE Activity System
Adapted from “The structure of a human activity system” (Engeström 1987, p. 78)

(Payler et al. 2007, p. 164)
Potential Models for IPE

1. Student-centered and interprofessional with patient involvement

2. Patient-centered and guided by patients
   - Important for identity construction

Bleakley and Bligh, 2006
Patient-Centered Medical Education as an Activity Setting

Figure 8. Patient-centred medical education configured as an activity system (The activity system is inherently unstable. Changes in any one element cause changes in all other elements leading to transformation of the system through time).

(Bleakley & Bligh 2006; p. 100)
Expansive Learning

- Knowledge is not stable or known ahead of time
- Learning occurs most often when contradictions occur and are resolved
- As new knowledge is generated, and new perspectives developed, new forms of practice and activity occur.

(Engstrom, 2004)
How would we understand IPE differently?

- IPE is developmental- including role, competencies, emotional and social learning

- IPE is socially and contextually situated; contexts are dynamic and changing

- IPE involves learning at both individual and collective levels

- IPE involves both learning that is designed and that which emerges.
Understanding IPE: Using Theoretical Approaches

An Example:

- Social cognitive theory – self efficacy
- Sociocultural learning – communities of practice
- Instructional methods
  - Active, experiential learning, in small groups
  - Problem-based learning/reflective practice

(Mann et al., 2009)
The Linköping Experience

- 25 years of IPE education
- Interprofessional learning: a process over time
- Integrated, developmental model
- Classroom experience
  - Small group learning
  - Common tools
  - Leading to ward placement
  - Participation in the workplace

( Wilhelmson et al, 2009; Lidscog et al, 2009)
Knowledge Translation in Interprofessional Education

What difference does IPE make to practice?
An example of contextual and social situatedness
- Evaluation of a cancer care program
- Changes in knowledge
- Improved understanding of other professions
- Changes made that were not intended
- Role of the context and other team members

(Mann, Sargeant and Hill, 2009)
Actor-Network Theory

Life, in education as in other spheres, is never only about the personal and the social. It is about the socio-material.

(Fenwick and Edwards, 2010; p. 4)
Actor-Network Theory

- Why “things” are so important
- Translation: how things come to be and how they change
- Networks and how they grow
- Effects of networks in terms of agency, identity, power and knowledge

(Fenwick and Edwards, 2010)
Interprofessional Education: One World, Different Perspectives or Multiple Worlds?

- Multiple ontologies and knowledge differences
- Network relations enacted within them
- Which knowledge is dominant?

(Fenwick and Ewards, 2010)
Fig. 5 Overview of key learning theories in the interprofessional education literature and the relationships between one another.

(Hean et al., 2009 p. 259)
Implications for Research and Practice

- An array of theories is available
- Both macro and micro level theories may be used together and complement each other
- Macro level theories can help understand “how” and “why” learning occurs
- Theory needs to be developed from the experience of learners and teachers
- Theory can be used to guide both design and evaluations
Implications for Research and Practice

- Curriculum design should also describe why it is chosen- what conceptual framework is being used?
- Curriculum design should focus on facilitating learning and collaborative interactions
- We may require an expanded view of outcomes
- Outcomes should also include emergent learning
- In IPE, patients can provide the focus for an activity system
Summary

In IPE, theories are needed to explain and predict learning that:

- occurs in complex adaptive systems
- is dynamic and occurs through space and time
- involves elements interacting and relating to each other
- captures collective as well as personal agency, artifacts and social context
References

References (cont’d)


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