

Assessment and evaluation of competencies for collaborative practice within the Interprofessional Learning Pathway

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Background

Interprofessional education (IPE) is when learners from two or more professions learn 'with, from and about each other'¹. At the University of Alberta (UofA), the Health Sciences Education and Research Commons (HSERC), in collaboration with the health sciences faculties, facilitates the development and evaluation of interprofessional (IP) competencies for practice through a shared curricular model called the IP Learning Pathway. The pathway is composed of a series of IPE learning experiences infused throughout the 2-4 year health sciences programs. Two IPE experiences within the IP Learning Pathway are required for almost all health sciences programs:

1) IP Pathway Launch (approximately 900 students), and 2) Essentials of Collaborative Practice course (INT D 410, 1200 students per year). These two experiences are delivered to health sciences students by HSERC on behalf of the health sciences faculties.

Experiential education promotes "learning by doing" and is an ideal approach for the development and application of IP competencies with health sciences students. "Experiential education first immerses learners in an experience and then encourages reflection about the experience to develop new skills, new attitudes, or new ways of thinking."² Broadly speaking, a competency is defined as the integrated application of a person's knowledge, skills, and abilities in a particular context³. Example competency domains underlying IP experiences include communication, teamwork, and reflection. This project meets the objectives of the University of Alberta's new Institutional plan to "*increase graduate and undergraduate students' access to and participation in a broad range of curricular experiential learning opportunities that are well-integrated with program goals and enrich their academic experience*". By promoting experiential learning and providing contemporary learning experiences, we position our students strongly for future career opportunities.

A previously funded TLEF entitled *Integration of Interprofessional Competencies in Health Science Programs: Building a bridge from classroom to practice environment* served as the catalyst to developing the IP Pathway Launch, an early IP learning experience required for all first year health science students. The launch is now formally integrated into curricula of almost every health science program. Our focus has now extended to the assessment of IP competencies and the development of an integrated assessment plan. An assessment plan includes specifications such as the types of IP assessments (e.g. reflective assignments, simulations), their frequency, and timing along the IP Learning Pathway (e.g. assessments with early learners or senior students). A key driver for the development of an IP assessment plan is the increasing focus on competency-based education within health sciences⁴. The assessment of competencies is complex and requires a robust, multi-faceted process⁵. This is especially true with assessing IP competencies.

Currently, a limited number of assessment methods are used within the pathway (e.g., reflective journals and Team Objective Structured Clinical Exam). The range of assessment methods need to be addressed to reflect and capture multiple learner and learning goals. Additionally, multiple, well-designed assessments can positively influence the student learning experience. To impact learning and capture outcomes, an integrated assessment plan is required that explicitly details what IP competencies are to be assessed and how, at what frequency, and when during the IP pathway.

Purpose

The purpose of this project is fourfold. First, we will develop an assessment plan for IPE in collaboration with key stakeholders. Second, we will develop and implement assessment methods prioritized by the key stakeholders and aligned with the assessment plan. Third, we will evaluate the a) assessment plan for its feasibility and comprehensiveness, and b) assessment methods and tools for their acceptability and quality. Fourth, we will disseminate our work in the form of workshops and a resource repository enabling access for IP educators locally, nationally, and internationally.

Educational Theory

Experiential learning principles underlie the development of IP learning experiences, therefore this approach will also guide the development of assessment methods and their timing within the IP Pathway. Theoretically, experiential learning is aligned with the constructivist theory of learning⁶. Using this theory directs us to assess both outcome and process learning which necessitates the development of multiple assessment methods. Development of learning outcome assessment tools will be done using an established conceptual framework for assessment design called Evidence Centred Design⁷ (ECD). To date, ECD has been successfully used to develop assessments of competencies in various contexts such as dental hygiene⁸ and science education⁹. The Input-Environment-Output model¹⁰ (I-E-O) will be used to inform development of process learning assessment. In the I-E-O model, **Input** refers to assessment of student variables, such as knowledge and attitudes before engagement in a learning experience. **Environment** refers to assessment of students during the learning experience. **Output** refers to assessing students after the experience. Application of the I-E-O model can capture both context and development of learning across time due to a learning experience.

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