



The Impact of Course Design, Gender, and Academic Level on Student Responses to an Introductory IPE Experience

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GOAL

Introductory IPE experiences are typically offered to early learners at different academic levels using a variety of online formats (1-3), but how these differences in learner characteristics and course design features might affect the students' learning experience is not yet understood.

COURSE DESIGN

Online course modules were aligned with IPE subdomains (teamwork, patient outcomes, roles) and designed with Student-Student (e.g., discussion board prompts) or Student-Content (e.g., video) interaction types (4). 2,373 students from 11 health science pre-professional and professional schools on 3 campuses completed the online course.

DATA ANALYSIS

A mixed-methods design was used with quantitative data about the attitudes measured by the SPICE-R2 survey and qualitative open-ended questions about students' opinions. Participants completed the pre- and post-survey, before and after completing the online course.

RESULTS

Students' attitudes improved significantly after the online course for all three SPICE-R2 subdomains ($p < .001$). Undergraduate students' attitudes changed more than graduate students ($p < .001$). Students preferred Student-Content more than Student-Student interactions ($p < .001$). Both the Student-Content and Student-Student interaction types were valued more highly by female students and undergraduate students than by male students and graduate students ($p < .001$).

Learner attributes and course design features impact student perceptions of IPE course value

One size does not fit all: Gender, academic level, and interaction type should be considered intentionally when designing introductory IPE courses

JOINT DISPLAY TABLES

Table 1. Joint Display of Quantitative, Qualitative, and Descriptive Data of the Subdomains, Gender, and Academic Level of Undergraduate Students and Graduate Students

Subdomain	Quantitative Data	Qualitative Data	Descriptive Data
Teamwork	Mean score: 4.5 (SD: 0.8)	Students valued teamwork highly, especially in patient care scenarios.	Undergraduate students showed higher scores than graduate students.
Patient Outcomes	Mean score: 4.2 (SD: 0.9)	Students appreciated learning about the impact of their actions on patient care.	Female students valued this subdomain more than male students.
Roles	Mean score: 4.0 (SD: 1.0)	Students found it helpful to understand the roles of other healthcare professionals.	Students preferred video content for learning about roles.

Table 2. Joint Display of Quantitative, Qualitative, and Descriptive Data of the Subdomains, Gender, and Academic Level of Undergraduate Students and Graduate Students

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Student-Student Interactions:

- Male students opined that S-S components were not as helpful in understanding the role of other healthcare professionals' roles in patient care, and preferred examples of "real-world collaboration" between professions as being more beneficial
- Graduate students desired deeper cross-disciplinary interactions with suggestions to organize discussion prompts around social justice, research/innovation, technology, patient care, social determinants of health to promote more engaged, free-flowing thoughts and discussions around common issues relevant to all health professions.

Student-Content Interactions:

- Male students suggested brief, information focus on factual description of professional education, qualifications and roles of each discipline
- Graduate students desired patient-centered videos that provided more "real life" scenarios & examples of interprofessional collaboration in practice

The mixed methods findings highlighted the importance of learner characteristics on the perceived value of course components, supporting meta inferences designated as confirmation or as confirmation and expansion, demonstrating a deeper understanding of the IPE subdomains.

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