

Student Assessments Of A Gamified IPE Approach Versus Traditional Case Study

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Literature recommends collaboration across professions begin early in the development of professional and interprofessional identity, with the goal of strengthening interprofessional care. As part of our IPE assessment, the first phase of the Kirkpatrick Model of evaluation has been implemented to discern participant reactions to two different IPE activities. One incorporated play or gamification as the key engagement strategy and the other utilized patient case studies. Participant feedback was collected after each event to inform design and

implementation of future IPE curriculum.

Methods / Description

First year Doctor of Physical Therapy (PT), Master of Science in Occupational Therapy (OT), and Master of Physician Assistant Studies Program (PA) students were placed into different interdisciplinary groups for each event. Consistent objectives were established for both activities.

IPE Objectives:

- 1.Recognizing professional roles and overlap
- 2. Interprofessional relationship building
- 3.Interdisciplinary teamwork to benefit patient care
- 4. Integration of knowledge

Case Study IPE

The event was composed of groups of students sitting and working through two separate clinical cases in a classroom setting. Each discipline contributed expertise from their field on the cases to create recommendations for disposition. Faculty from all disciplines assisted in facilitating the care plan for each group.

Gamified IPE

This event included Athletic Training students in addition to the other three disciplines. The event was comprised of "racing" through 10 stations each comprised of a hands-on skill followed by 2-3 relevant academic questions for the group to answer. Each hands-on skill was directed toward a single discipline with the academic questions involving the other disciplines in the group.

At the conclusion of each event students completed anonymous surveys via QR code to determine how well objectives were met during each event.

Surveys included three statements with ratings on the 5-point Likert scale (5=strongly agree, 4=agree, 3=neutral, 2=disagree, 1=strongly disagree):

- 1.I would recommend this experience to future students.
- 2.I understand how PT, OT and PA can work together to benefit patient care.
- 3.I have a better understanding of the other professions roles in patient care.

Results / Outcomes

Case Study IPE:

Survey response rate for the case study event was 77%.

Mean scores for each statement on the 5-point Likert scale were 4.27, 4.23, and 4.19, respectively.

Results / Outcomes Cont...

Gamified IPE:

Survey response rate for the gamified event was 91%.

Mean scores for each statement on the 5-point Likert scale were 4.59, 4.71, and 4.62, respectively.







Conclusion

Student reaction favored gamification based on survey data relating to IPE objectives. Both events demonstrated positive experiences. Literature supports IPE progression from socialization with meaningful student engagement towards more clinically applied activities (Moote R, C Anthony, L Ford, et. al). Next steps would be to try the gamified activity first in the IPE curriculum followed by the patient case study approach later in the curriculum. Participant feedback will again be solicited and subsequent assessment of participant learning, behavior changes, and results (examples of application during clinical rotations) will be performed.

References:

Fox L, Onders R, Hermansen-Kobulnicky CJ, et al. Teaching interprofessional teamwork skills to health professional students: A scoping review. *J Interprof Care.* 2018;32(2):127-135. doi:10.1080/13561820.2017.1399868

Fusco NM, Foltz-Ramos K, Jacobsen LJ, Gambacorta J. Educational game improves systems thinking, socialization, and teamwork among students of 13 health professions programs. *J Interprof Care.* 2024;38(1):176-181. doi:10.1080/13561820.2023.2243307

Moote R, Anthony C, Ford L, Johnson L, Zorek J. A co-curricular interprofessional education activity to facilitate socialization and meaningful student engagement. *Curr Pharm Teach Learn*. 2021;13(12):1710-1717. doi:10.1016/j.cptl.2021.09.044

Price SL, Sim M, Little V, et al. Pre-entry perceptions of students entering five health professions: implications for interprofessional education and collaboration. *J Interprof Care*. 2021;35(1):83-91. doi:10.1080/13561820.2019.1702514

Riskiyana R, Claramita M, Rahayu GR. Objectively measured interprofessional education outcome and factors that enhance program effectiveness: A systematic review. *Nurse Educ Today*. 2018;66:73-78. doi:10.1016/j.nedt.2018.04.014

Sanko JS, Hartley GW, Mckay ME, Drevyn EM, Mandel DW, Gerber KS, Motola I. Insights Into Learning Among Physical Therapy, Medical, and Nursing Students Following a Simulation-Based, Interprofessional Patient Safety Course. Cureus. 2023 Mar 29;15(3):e36859.

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