Use of Serious Games to Promote Interprofessional Competency

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1. Participants will experience IPE serious gaming as an educational strategy.
2. Participants will compare and contrast learning outcomes between traditional instruction and serious gaming strategies.
3. Participants will explore opportunities for the use of serious games in their own IPE programs.
“...teamwork requires a shared acknowledgement of each participating member’s roles and abilities. Without this acknowledgement, adverse outcomes may arise from a series of seemingly trivial errors that effective teamwork could have prevented” (Baker et al., 2005b, p. 14).
Core Competencies
Interprofessional Collaborative Practice
(2016)

Competency Domain 1: Values/Ethics for Interprofessional Practice
Competency Domain 2: Roles/Responsibilities
Competency Domain 3: Interprofessional Communication
Competency Domain 4: Teams and Teamwork
• Supports use of games “as a way to engage patrons and students to help develop important skills”

• Nicholson (2011) “Similar to traditional pedagogical tool: quizzes”
  – Recommends a more engaged format
IPE Challenge! & Core Comp Stomp

- Focus on the competency domains

IPE Challenge!
- Roles and Responsibilities

Core Comp Stomp
- Introduction to all four domains
• Traditional Trivial Pursuit format
  – Extrinsic in nature
  • Demonstration of knowledge
  – Easy to create
  – Adaptable to different topics/professions
• Intrinsic format
  – Focus is on learning new information
  – Provides more opportunity for learner engagement
Game Pedagogy

Core Comp Stomp

• Traditional Roll and Go
  – Extrinsic in nature
    • Introduction to all domains
  – Easy to create
  – Questions adaptable from introduction level to more advanced situational questions

• Intrinsic format
  – Also focused on learning new information
  – Students/players want to use resources
IPE Challenge!
The game
Core Comp Stomp
The game
Conducted pre and post survey examining student perspectives of IPE when using a game format
  - Areas of significance included:
    • knowledge of roles \( (p < 0.00001) \)
    • requirements of various professions \( (p < 0.02) \)
    • support for other professions \( (p < 0.02) \)
Research Study on IPE Challenge!

- Game evaluation results

<table>
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<th>Question</th>
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<th>Student Discipline</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
<th>Overall Agreement</th>
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<td>This game assisted me in gaining knowledge about other disciplines</td>
<td>28</td>
<td>OTA</td>
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<td>14.29</td>
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<td>This game assisted me in understanding my role in the healthcare team</td>
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<td>OTA</td>
<td>64.29</td>
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<td>This game created a good teamwork environment where we could learn from each other</td>
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<td>OTA</td>
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Variations (aka expansion packs!):

- Change out disciplines – IPE Challenge!
- Change out questions
  - More specifics about individual professions
  - Utilize scenario questions
    - Who do you call for specific patient problems
  - Move to short answer questions with a moderator
Variations (aka expansion packs!):

- Collect more than 1 token per discipline (IPE Challenge!) or competency domain (Core Comp Stomp)
- Place players into interprofessional teams/collaborate with another discipline to play the game
  - Promote discussion amongst group members
- Assign students research prior to play
  - 5 out of 6 chemistry classes showed marked improvement in post test

Turning play into learning

• Assign learners task of building questions for game or designing the game
  – Move away from only being players
    • “gives learners greater agency and control over the process of game creation, supporting them to learn a whole host of associated design, planning, communication and teamwork skills” (p. 253)
      » Whitton (2012)
    – “supports acquisition of knowledge and skills”
      » Arnab, et al. (2012)
IPE Challenge!
The game
Core Comp Stomp
The game
Time to Play

• Divide into interprofessional teams of at least 2 players per team and a minimum of 2 teams per game
• Play the game!
• Will debrief following gameplay
Debrief and Questions

- What went well?
- Opportunity for Improvement?
- Ideas for use?
Further Research

• Examining attitudes of students toward interprofessional education

• Using game format for TeamSTEPPS education

• Using game format for simulation preparation
References


THANK YOU!

Want to know more? Visit our IPE website:

http://www.usi.edu/ipe-resources