

Transition from multi-disciplinary to an interprofessional education model: successes & lessons learned along the way

Scott Hanes, PharmD

Ziemowit Mazur, EdM, MS, PA-C

Michel Statler, MLA, PA-C

Ramia Safi, COP



Background – Phase 1

- Initial “interprofessional” course was multidisciplinary lecture-based course taught by PA faculty
 - Focus: Disease diagnosis, clinical presentation, management
 - PA: Year-long core course (8-10 credits per quarter)
 - Pharmacy: met curricular needs; limited drug therapy
 - “Interprofession” = students shared classroom space; interactions limited



Challenges – Pharmacy Perspective

- Excellent education but above pharmacy scope of practice
- Exams: identifying and removing questions out of scope of practice
- How to handle poor student performance in context of scope of practice?
- Student anxiety
 - Poor performance
 - Lack of professional identity



Phase II

- Changes
 - To limit education outside of scope of practice – pharmacy students to receive general overview of disease topic
 - Pharmacy no longer attends detailed disease/ diagnosis discussion
 - Participate in case recitation to increase professional collaboration



Challenges

- Student collaborations remain limited
 - Pharmacy students not attending detailed lectures felt unprepared and lacked confidence to engage in discussion
 - Interprofessional culture non existent; class divisions apparent
 - Identifying exam questions relevant to pharmacy more challenging
 - Overview very similar to first year physiology course
 - Student anxiety/frustration



Phase III

- Abandon concept of attempt to meet professional needs within single course
- Pharmacy no longer enrolled in PA course
- Relevant material placed into Pharmacy therapeutics course
- Developed course that emphasizes interprofessional collaboration while maintaining professional identity



Interprofessional Education Ideals

- Benefits of IPE
 - Reduce professional-centrism (Pecukonis, 2014)
 - Break interprofessional barriers (Reeves, 2010)
 - Identifying professional limitations (Hall, 2013)
 - Become comfortable as a member of a health care team (Pecukonis, 2014)



Course Design

- Case based learning
 - Promotes interdisciplinary collaboration and team problem solving (Leon, 2015)
 - Allows for focus on clinical problems seen in practice (Cisneros, 2002)
- Incorporation of the IPEC competencies into course syllabus



Course Description

- **Title:** Interprofessional Case Collaborations (ICC)
- **Credits:** One credit hour
- **Grading:** Pass/Fail (attendance, peer-evaluations, submissions)
- **Duration:** Fall, Winter, Spring Quarters

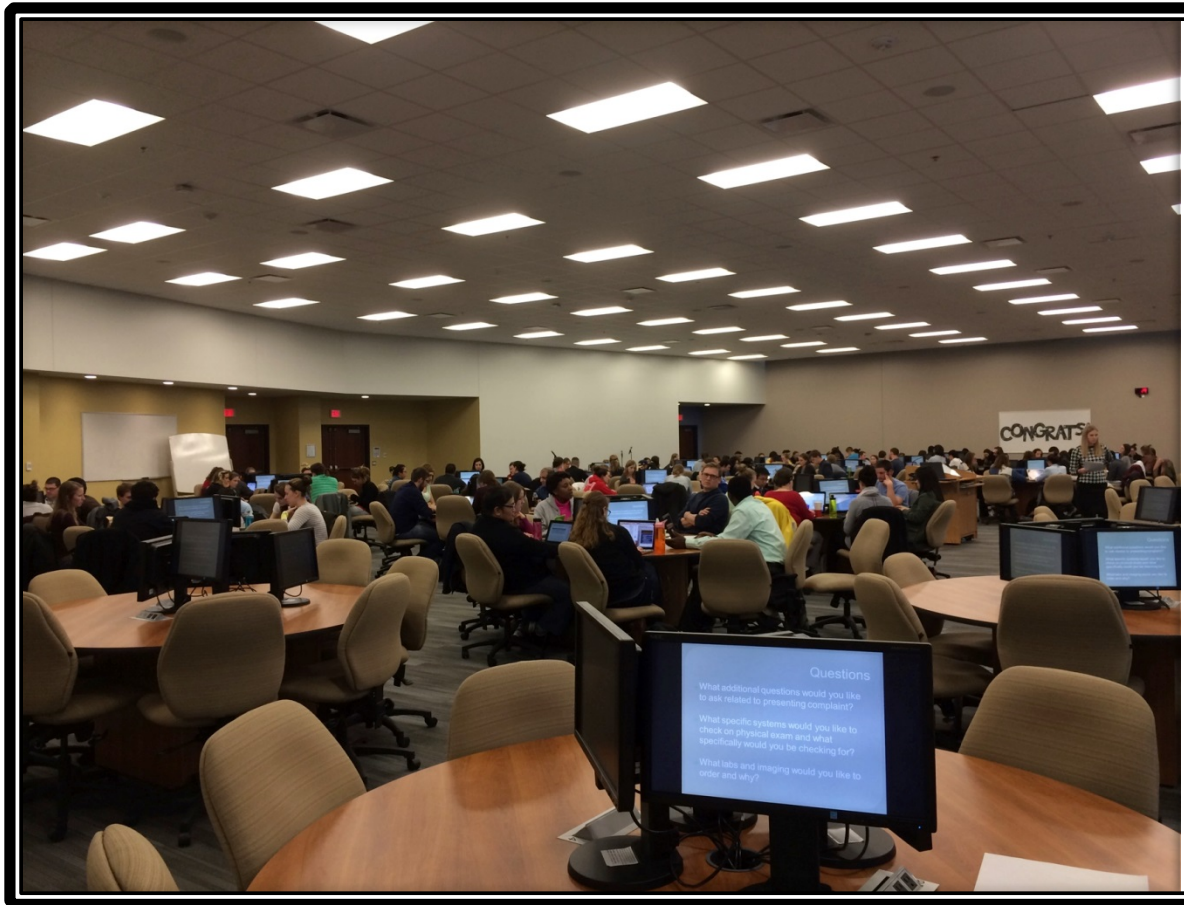


Methods: Course Design

- Faculty facilitator guide
- Groups with 3 PA and 3 COP students discuss clinical vignette and associated questions
- Students submit answers, followed by large group presentations & discussion



Classroom Space



Assessment

- Grading rubric for assignments
- Peer evaluations completed mid-course
 - Likert scale
 - Participation, team process, communication, timelines, and problem solving
- Course surveys at the completion of each quarter
 - Allowed for course adjustments



Grading Rubric

Elements/Standards	Excellent 0.75 points	Satisfactory 0.30 points	Unsatisfactory 0 points	Score
Differential diagnosis				
Diagnosis & expected/ supportive findings				
Lab studies & imaging				
Pathophysiology, risk factors				
Treatment and plan				
Elements/Standards	Excellent 0.5 points	Satisfactory 0.25 points	Unsatisfactory 0 points	Score
Prescription				
Fatal Error				

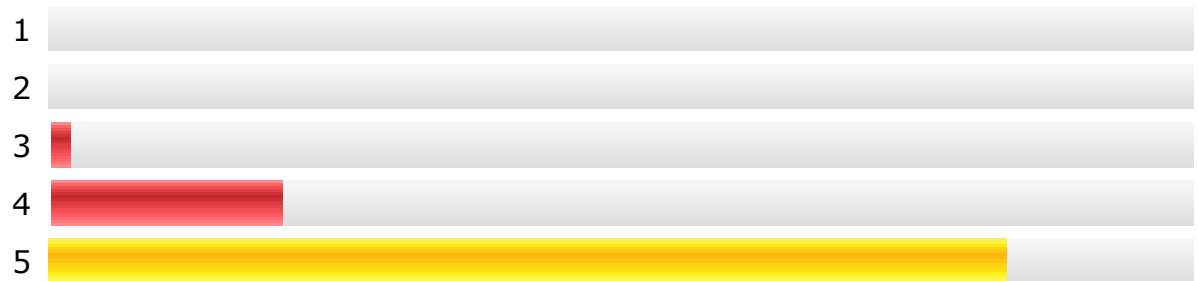


Peer Evaluations

Date:	Final						
		Scoring: 1-4 . 1 = poor performance, 4 = excellent performance					
Category	Question	Student 1	Student 2	Student 3	Student 4	Student 5	Student 6
Participation	Actively engaged in group discussions						
Team Process	Initiated and facilitated group process; helped clarify and negotiate roles; practiced integrity in interactions with others; treated others equitably; showed interest and enthusiasm						
Communication	Communicated clearly: listened and responded to team; accepted and gave feedback; willingly shared information with others; made effort to contribute to move discussion forward						
Timeliness	Helped keep group on track with case responsibilities						
Problem-solving	Generated ideas; participated in analysis and fitting solution to problem; showed initiative in seeking solutions						
Comments							
	Sum	0	0	0	0	0	0
	Score	0	0	0	0	0	0

Course Surveys

This course demonstrated the importance of interprofessionalism within the healthcare environment



- Overall Impression - course was well received
 - Great foundation for interprofessionalism
 - Better providers and diagnosticians
 - Improved skills translate to real healthcare environment



Student Surveys

Survey Question	Average of all student responses (%)
Improved teamwork and communication skills	89%
Showed importance of inter-professionalism	90%
Working collaboratively was necessary to complete cases	90%
Felt like a valuable team member	89%
Likely to ask other professional for clarification	90%
Increased confidence in working with other professionals	88%
Knowledge increased as a result of course	89%



Why Interprofessional classes?

Learned what skills the other professionals have

Became more comfortable interacting with other professionals

Gained new respect for other health professionals

Improved communication and formed relationship with team members

Working interprofessionally was more efficient and effective

Became better equipped to participate in an interprofessional team



Improvements

Include P2 students

Include medical students

More time for discussion in groups

Complete the class discussion from group tables

Keep running list of group participation

Include more than one case every class period



Future Recommendations

- Use of ExamSoft
 - Grading rubrics
 - Streamline peer evaluation process
- Monitor outcome measures



References

- Epstein RM, Hundert EM. *Defining and Assessing Professional Competence*. JAMA. 2002;287:226-35.
- Legare, F., Stacey, D., Poulio, S., and Gauvin, F.P. “*Interprofessionalism and shared decision-making in primary care: a stepwise approach towards a new model.*” Journal of Interprofessional Care, 2011. 25: 18-25.
- Leon, Juan, S. et al “*A Case-Based Problem-Based Learning Approach to Prepare Master of Public Health Candidates For the Complexities of Global Health.*” American Journal of Public Health 105. (2015) S92-S96
- Pecukonis, E. *Interprofessional Education: A Theoretical Orientation Incorporating Profession-Centrism and Social Identity Theory*. Journal of Law, Medicine & Ethics, 2014; 42: 60-64.
- R. M. Cisneros, J. D. Salisbury-Glennon, and H. M. Anderson-Harper, “*Status of problem-based learning research in pharmacy education: a call for future research,*” American Journal of Pharmaceutical Education, vol. 66, no. 1, pp. 19–26, 200
- World Health Organization. *Framework for action on interprofessional education & collaborative practice*. Health Professions Networks, Nursing & Midwifery, Human Resources for Health, 2010.

