

# Merging of Relevant IPE Themes from a Longitudinal Curriculum to Create a Capstone Project

Darcy Solanyk, MS, PA-C; Mark Earnest, MD, PhD; Jackie Glover, PhD; Kari Franson, PharmD, PhD, BCPP; Diane Brunson, RDH, MPH; Amy Nordon-Craft, PT, DSc; Karen Gorton, PhD, RN, MS, ATC; Wendy S. Madigosky, MD, MSPH; Amy Barton, RN, PhD  
University of Colorado Anschutz Medical Campus

## Background

- 592 students participated in a year long Interprofessional Education and Development course (IPED)--2 hour sessions for 16 weeks (8 weeks spring 2014; 8 weeks fall 2014)
- During the sessions and for the capstone project students worked in small interprofessional teams of 7-8 students
- Sessions utilized a team based learning approach
- Based on the four IPEC competencies, we categorized the sessions into the following domains:
  - Teamwork and collaboration
  - Values and ethics
  - Quality and safety
- Each individual session covered one of the three domains with connections made between sessions when appropriate.
- To enhance student retention of concepts, application exercises were used (i.e. 8 step ethical analysis, etc.).
- The purpose of the capstone session was to allow students to demonstrate their integration and synthesis of key concepts taught during didactic sessions.

## Methods

- The culmination of the course was a final two hour capstone session evaluating all three topic areas—teamwork and collaboration, ethics, and values and quality and safety.
- Students were required to review select material from previous sessions prior to the capstone.
- Highlights of the final project included:
  - An initial case scenario of a medical error.
  - Using team based tenets, teams conducted a root cause analysis.
  - The case scenario progressed and the students then began completion of an 8 step ethical analysis.
  - During the 8 step ethical analysis, teams were given an additional task to be completed in a limited amount of time.
  - Students utilized interprofessional communication tools such as huddles/debriefs and based on knowledge of professional roles and responsibilities to allocate resources and complete all required tasks.
  - Students were required to make a final presentation and were graded by their peers given a specified rubric.

## Results

- Students were surveyed at the end of the semester using the online learning management system, Canvas. Student participation was mandatory.
- Students were asked to score the capstone on a 5 point Likert Scale on the following questions:
  - The capstone exercise provided an effective opportunity to demonstrate my knowledge and skills.
  - The capstone effectively enabled me to meet its stated objectives.
  - The capstone was an effective way for me to synthesize IPED course content.

## Spring Semester

Session Topic	Competency Domain
Team Structure	Teamwork and Collaboration
Background/Intro	Values and Ethics
Process of Ethical Analysis	Values and Ethics
Roles and Responsibilities, Leadership	Teamwork and Collaboration
Systems level practice	Quality and Safety
Situational monitoring and mutual support	Teamwork and Collaboration
Informed consent and decision making	Values and Ethics
Patient engagement	Quality and Safety

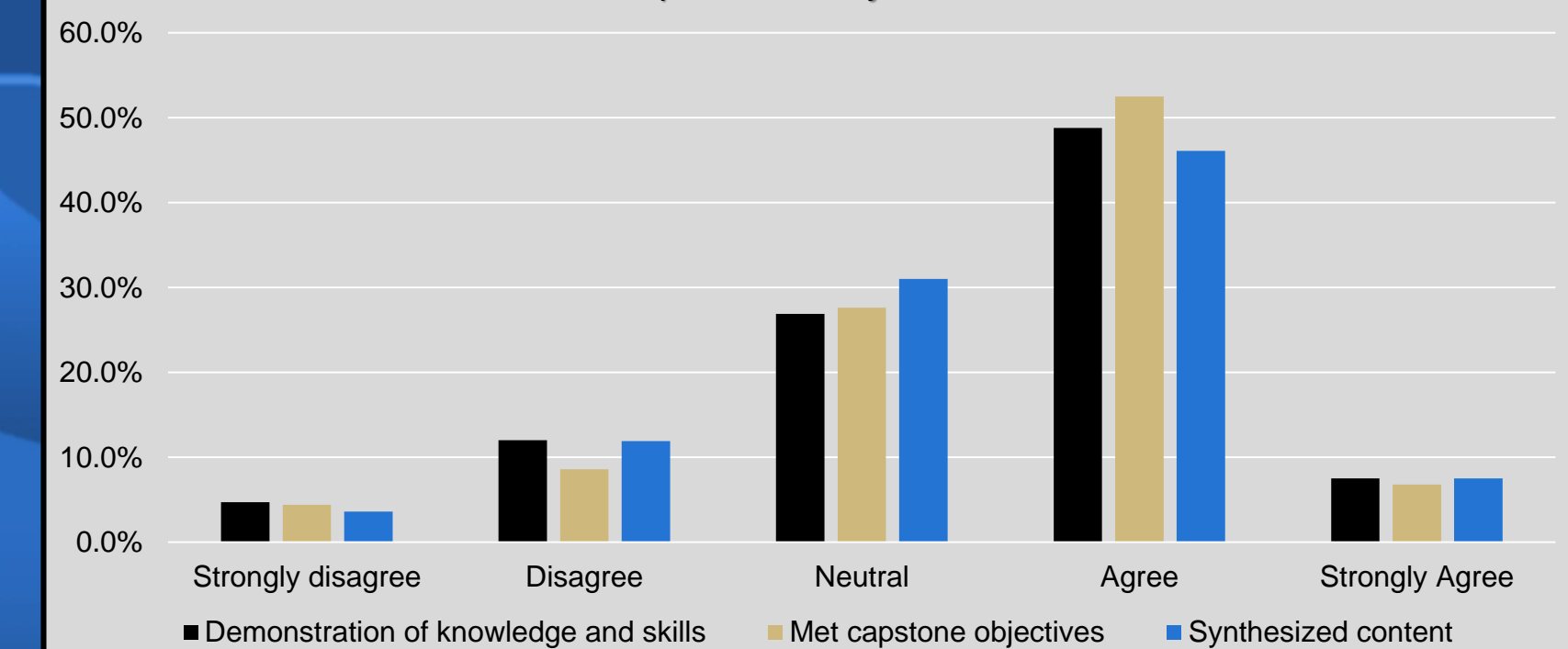
## Fall Semester

Session Topic	Competency Domain
Roles & Responsibilities	Teamwork & Collaboration
Conflict Management	Teamwork & Collaboration
Conflicts of Interest	Values and Ethics
Access & Justice	Values and Ethics
Improving Care	Quality & Safety
Culture of Safety	Quality & Safety
Advocacy and Assertion	Teamwork and Collaboration

## Capstone Session

Timeline	Team Task
30 minutes	Part I--Error identification, reporting and system analysis <ul style="list-style-type: none"><li>Root Cause Analysis</li><li>Preventive recommendations</li></ul>
40 minutes	Part II--8 step ethical analysis of situation resulting from error in part I
30 minutes	Part III--Team Presentations to hospital administrative team regarding error and system improvement recommendation from part I and ethical analysis and decision from Part II
5 minutes	Individual reflection

Capstone Survey Results



## Conclusions

- Based on this one cohort, students from 6 various health professions programs perceived the capstone project to incorporate the key concepts from the IPED Course.
- Students perceived the capstone project to be an adequate way of demonstrating their knowledge and skills around key concepts within the competency domains.
- Students found the capstone session required them to synthesize and integrate information obtained from individual sessions taught throughout the year.
- This data is based on student self-perception; therefore, further assessment of the final capstone project products would allow for more objective measurement of the knowledge and skills of the students in applying key concepts.
- The data suggests that a capstone project incorporating the four IPEC domains in a team based learning environment is an effective learning tool in our institution.
- Further adaptation of this process would suggest that this framework could be used for different domains and activities at other institutions.

## References

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