

INTRODUCTION

- The Accreditation Council for Pharmacy Education's "Standards 2016", states that PharmD programs are required to offer a didactic curriculum that is delivered via teaching/learning methods that actively engage learners.¹
- Evidence supports the use of active learning to stimulate higher-order thinking and improve student motivation to learn.²
- Second-year pharmacy students are required to complete aseptic technique validation in a cleanroom in preparation for their Institutional Introductory Pharmacy Practice Experience (IPPE).

OBJECTIVES

- Assess second-year pharmacy students' perceptions of the effectiveness of third-year pharmacy student assistants teaching aseptic technique in the cleanroom and lecture as part of the Principles of Pharmacy Practice Course.
- Evaluate survey results to improve peer teaching and active learning opportunities.

*"To teach is to learn
twice over"*³

METHODS

- Two third-year pharmacy student assistants taught aseptic technique validation to groups of two or three second-year students in the cleanroom and taught one lecture.
- Students completed a gloved fingertip sampling and low and medium-risk media fill validation as specified by USP <797> Pharmaceutical Compounding – Sterile Preparations.
- Instruction was provided on donning hair covers, face masks, shoe covers, gowns, and sterile gloves. Proper hand washing technique was also included in the exercise.
- Students returned to the cleanroom on two more occasions to complete two more gloved fingertip samplings. Each student spent approximately three and one-half hours in the cleanroom to complete all activities.

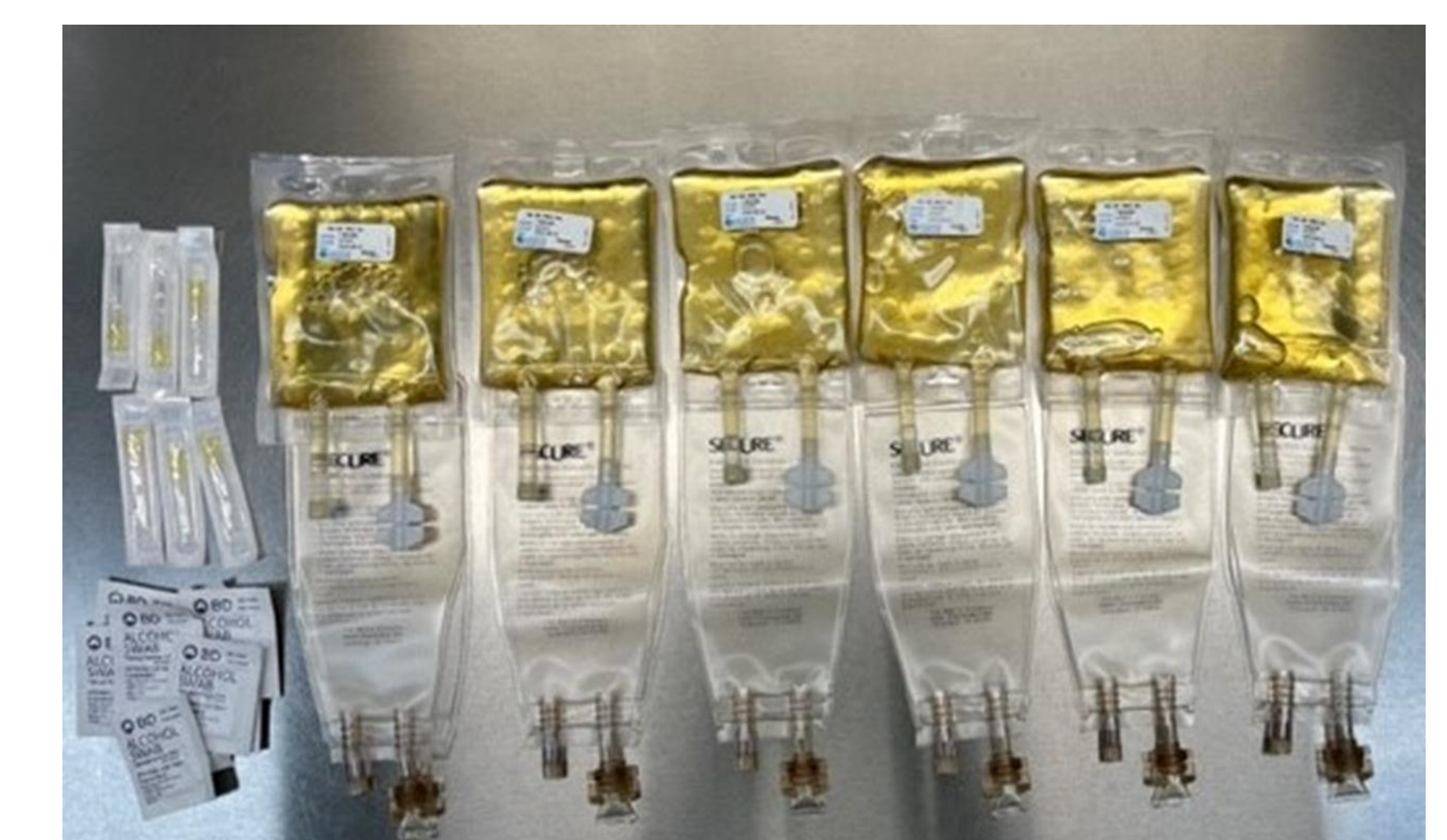


RESULTS

- Students were given an anonymous online survey comprised of twelve questions about the active learning exercises and the peer teachers. Eighty-five of ninety-two students completed the survey (92.4% response rate).
- Using a scale of 1-5 (1=Strongly Disagree; 5=Strongly Agree), students answered in agreement with several statements:
 - the cleanroom exercises helped me feel more prepared for my Institutional IPPE (4.27±0.93)
 - active learning in the cleanroom was more valuable than traditional lectures (4.59±0.91)
 - active learning in the lecture was more valuable than traditional lectures (4.3±1.14)
 - the lecture helped me feel more confident about my preparedness for my Institutional IPPE (4.02±1.25)
 - 78.9% of students (n=38) reported it was more helpful for the exercises to be led by a peer.

CONCLUSIONS

- Based on survey responses from the majority of students, peer teaching and active learning exercises were effective in preparing students for their Institutional IPPE and were more valuable than traditional lectures.
- Survey responses will be used to evaluate peer teaching in the cleanroom and lecture with the goal of improving active learning and peer teaching opportunities.



REFERENCES

1. Accreditation Council for Pharmacy Education. Accreditation Standards and Guidelines for the Professional Program in Pharmacy Leading to the Doctor of Pharmacy Degree. "Standards 2016"
2. Gleason BL, Peeters MJ, Resman-Targoff BH, et al. An active-learning strategies primer for achieving ability-based educational outcomes. Am J Pharm Educ. 2011;75(9):186.
3. Joubert J. Joubert: A Selection from His Thoughts. 1899