

Student Pharmacist Engagement and Learning Outcomes in a Three-Week Becoming a Pharmacist Course

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Objectives: To determine the effects of a three-week Becoming a Pharmacist course on student pharmacist engagement and significant learning outcomes.

Methods: A three week course at the beginning of the professional program was designed to introduce the major areas of the curriculum and set expectations for learning and engagement. During the course, two instruments were administered using the Qualtrics survey system to all 164 first year pharmacy students at the end of each week. Fink's Taxonomy of Significant Learning was used to develop six statements about learning outcomes. The Classroom Engagement Survey (9 questions) was modified to assess engagement. All statements were rated using a 5 point Likert, strongly agree-strong disagree scale. Friedman's test was used to evaluate differences and Cohen's d was used to examine effect size.

Results: Weekly response rates were 92%, 96% and 90%. For learning, significant differences were found for Building Foundational Knowledge ($p=.036$), Integrating Knowledge ($p<.001$), Learning About Myself/Others ($p=.002$), and Caring More/Differently About the Subjects ($p=.002$), with the largest effect size for Integrating Knowledge ($d=.50$). Applying Knowledge ($p=.706$) and Learning About How to Learn ($p=.922$) are areas that could be enhanced. For engagement, significant differences were seen for six of nine variables, with the largest effect size for "I contributed my fair share" ($d=.81$).

Implications: Newly devised and previously available instruments can be useful in tracking student learning and engagement over time. These instruments can affirm positive design elements and instructional efforts and help identify areas for refining learning activities to strengthen learning effects.