



## Identifying and Assessing Co-Curricular Learning in Pharmacy Students

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### Abstract

*Co-curricular learning is recognized as having a positive impact in the learning, growth, development, and overall educational experiences of students. Co-curricular learning allows students to couple the engagement of their campus life with their life outside of academics. Through this means of engagement, the student's personal development is typically impacted in a positive manner [1]. This positive impact is found in students regardless of their age, race, gender, or socioeconomic background [1]. Some examples of skills further developed and/or enhanced through co-curricular learning include: leadership development, effective communication, development of personal goals, and development of educational goals [2]. In 2016, accreditation standards for the Doctor of Pharmacy (PharmD) programs in the United States were modified to now require the integration of affective domain elements [3]. This new mandate has required pharmacy schools to find ways of effectively identifying and assessing interactions that impact affective domain elements, including co-curricular learning experiences that students participate in throughout their time in pharmacy school. Effectively assessing co-curricular learning is not always an easy feat to accomplish. The presenters will highlight findings from an assessment of co-curricular learning of PharmD students.*

**Keywords:** Assessment, Co-curricular Learning, Pharmacy Students.

### 1. Introduction

Co-curricular learning has long been viewed as one means of engaging students while simultaneously enhancing their curricular experience [1]. While this is true, few have mandated assessing the impact of co-curricular engagement until the Accreditation Council for Pharmacy Education (ACPE) changed accreditation standards to now require colleges of pharmacy to assess and track co-curricular learning in their students throughout their time in Pharm.D. programs [4]. Given this new requirement for accreditation, finding means of effectively identifying and assessing co-curricular learning for pharmacy schools became critical. This paper highlights the assessment efforts and findings on co-curricular learning at the University of Georgia's College of Pharmacy.

### 2. Definition of co-curricular learning

Co-curricular learning are structured activities that take place outside of the classroom while complementing the formal curriculum of a program [5]. This can include a wide range of activities, such as: involvement with student organizations, research, work, internships, volunteering, community engagement, and a plethora of other activities. These activities may be designed/implemented by the college, may be designed/implemented by an external entity, or even designed/implemented by the students themselves. It is important to distinguish that students also engage in extracurricular activities, which occur outside of the classroom environment and do not complement the formal program curriculum.

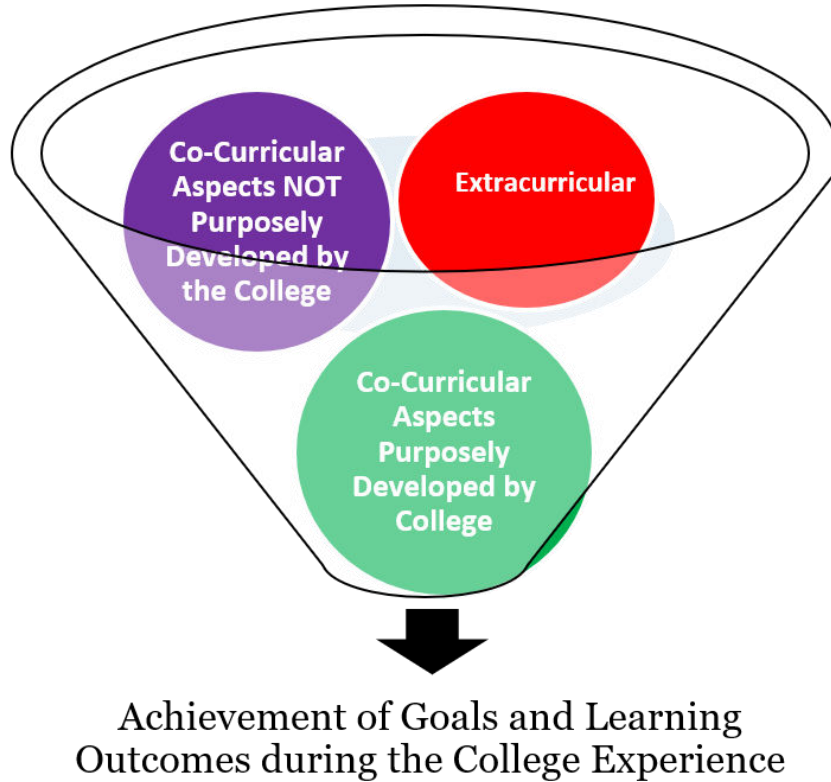


Fig.1. Co-curricular and extracurricular impact on learning outcomes in college

When the college intentionally plans and implements a co-curricular activity, assessing the impact of that activity is key. Doing so allows for the college to better understand how the students perceive the impact of the activity on their learning.

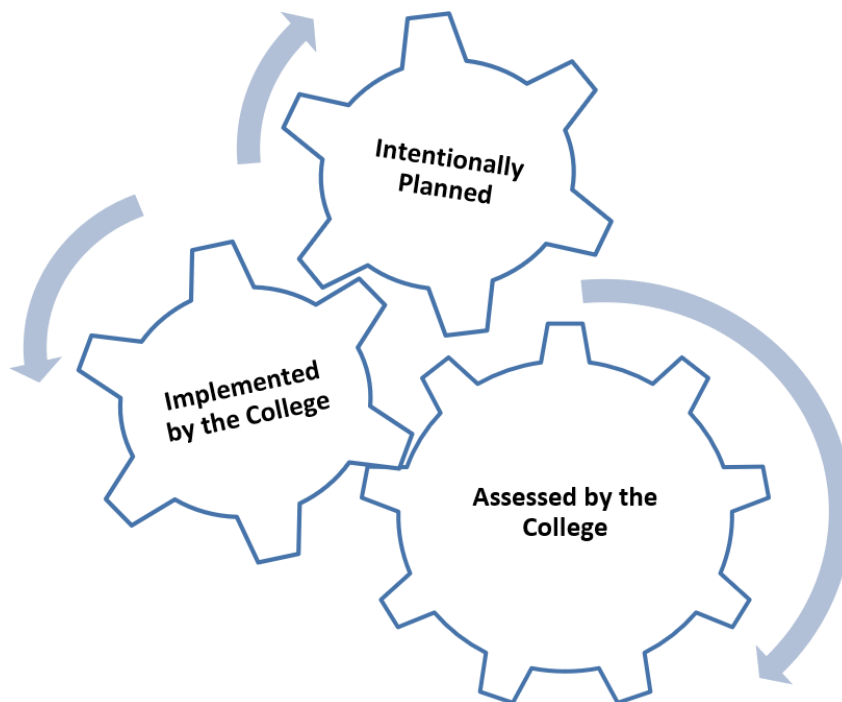


Fig. 2. Components of purposely delivered co-curricular activity



### 3. Importance of assessing co-curricular learning in Pharm.D. students

Starting in 2016, the ACPE mandated that colleges of pharmacy in the United States integrate co-curricular learning throughout their standards [4]. The use of assessment helps in determining the impact of the co-curricular activity from the perception of the student. Given the relatively new nature of this change in accreditation, schools of pharmacy were left to design their own means of assessing co-curricular learning in their students.

### 4. Assessment method

Starting Fall 2015, a survey was administered to all current Pharm.D. students at the University of Georgia College of Pharmacy. This same survey has been administered each semester since then, resulting in collection of data twice annual from all current Pharm.D. students at the time the survey is administered. The assessment survey consisted of six questions: five questions were quantitative in nature, and one was qualitative in nature. Between Fall 2015 and Spring 2018, a total of 2,187 surveys were completed by students.

### 5. Findings - Quantitative

Key quantitative findings from the assessment include in terms of what co-curricular activities they found to be most impactful for them the semester they took the survey. Note that students could pick more than one response if they found more than one activity impactful for them that semester.

- 70.0% participated in at least one student organization.
- 45.6% participated in "Organization Hour" (A dedicated time each week where no formal classes are held, allowing for students to meet informally, as part of a student organization, brown bag discussions, journal clubs, or participating in talks by individuals invited to speak on campus).
- 23.0% participated in "Dawgoberfest" (a student run health-fair held annually each October).
- 17.2% participated in "Day at the Dome" (a day where students engage with state legislatures and learn how local laws impact their future practice as pharmacists).
- 11.9% participated in the Student Ambassador program (working with the college to meet with prospective Pharm.D. students).
- 8.0% participated/attended a professional pharmacy conference.
- 6.2% participated in research outside of the classroom.

Given there are currently 17 different student organizations throughout the University of Georgia College of Pharmacy, this likely explains why such a large number of students reported participation in a student organization as impactful to their co-curricular learning.

### 6. Findings – Qualitative

As part of the assessment, students were asked the following open-ended question: *"Please share some specific examples of what you learned as a result of your engagement in co-curricular activities this semester."* Students articulated a rich collection of responses, which were analyzed and coded over the course of several months in the latter portion of 2018. Two large over-arching themes emerged from the data:

1. Certain places that students noted as excellent for engaging in co-curricular activities, and
2. Certain topics that students noted as impactful for facilitating co-curricular engagement.

Quotes from the students on their experiences from places they described as being highly impactful are articulated below.

#### 6.1. Places that facilitate co-curricular activities

Places that the students noted as impactful for their co-curricular engagement included: volunteering at indigent care clinics, working outside of school in a pharmacy setting, participating in Org Hour, and attending/participating in Grand Rounds. Selected quotes from students are included to highlight the impact of these experiences.

##### *Volunteering in indigent care clinics*

"Through my volunteer hours, I feel I have become more adept at dealing with cultural differences in patients as many of the patients are from a different background and some do not speak English. Working there has also helped me to develop effective communication skills by counseling patients and dealing with the other volunteers to make sure workflow goes smoothly."

*Working outside of school in a pharmacy setting*

“A considerable amount of my overall growth stems from my time spent as a pharmacy intern and frequently interacting with patients. Specifically, counseling patients has helped to identify areas of my communication skills that are lacking. For example, I had a tendency to be a bit verbose when speaking with patients, causing them to lose interest and focus their attention elsewhere. Having the opportunity to continually practice this balance between quality vs. quantity regarding patient education has been the most educational and stimulating for my personal growth.”

*Participating in Org Hour*

“Attending organization hour and listening to all the different speakers’ shows there are many different paths to being successful as a pharmacist. Numerous speakers talked about being open and willing to take the steps to climb the ladder and achieve whatever goals you want. By being open to new things such as leadership roles and becoming more active all of the presenters were able to move into roles they are not only good at but enjoy doing.”

*Attending/participating in Grand Rounds*

“In grand rounds, different professionals come and talk about guideline updates or new FDA approved drugs and their place in therapy. This kind of information provides guidance on how to provide the best patient-centered care based on evidence.”

**6.2. Topics that facilitate co-curricular activities**

Topics that the students noted as impactful for their co-curricular engagement included: Advising/counseling a patient, undertaking a leadership role, considering cultural differences of those you are caring for, interprofessional interactions, and women in pharmacy. Selected quotes from students are included to highlight the impact of these experiences.

*Advising/counseling a patient*

“I learned the importance of helping each patient as a unique individual (whether that be cultural competency or any other aspect). In order to improve patient outcomes you have to have respect and truly care for each patient you encounter. I also enhanced my leadership skills by planning Multicultural Health Fair.”

*Undertaking a leadership role*

“I learned to operate as a team and also as a leader. It was very enlightening experience working with so many different people from different backgrounds and I feel that it has immensely helped in me in interpersonal communications. Being a part of student organizations helped me build leadership skills.”

*Considering cultural differences of those you are caring for*

“I dealt with a lot of cultural disparities and low-income populations this summer and fall semester. I also volunteer throughout the year for a refill clinic and Hepatitis C clinic which involves uninsured patients, so we have to overcome all of the social work aspects of healthcare.”

*Interprofessional interactions*

“I feel like one of the biggest things I learned this semester was how to interact with others in a healthcare team. Being a part of an organization requires you to take into consideration the ideas and recommendations of others and listen attentively to their goals. I feel like these will be useful skills to have when I eventually start my career as a pharmacist and interact with doctors, nurses, etc.”

*Women in pharmacy*

“Women in Pharmacy Night was so much fun because I got the chance to get to know a few very successful, well-rounded, and inspiring pharmacists. We had small-group chats with 3 different pharmacists where we truly got to know them and what they do. They each had something unique to bring to the table, and it got me thinking about all of the different

directions I can take with my career. Plus it opened up some relationships so now I feel like I have some mentors that I can contact when I have questions.”

## 7. Summary and conclusion

The findings from analysis of students responses note a wide range of co-curricular activities that positively impacted their learning and growth while in pharmacy school. By providing a wide range of activities that are supported by the pharmacy school, students are more likely to find a co-curricular activity that is congruent with their own interests and career readiness.

Given the variability of co-curricular experiences, determining which co-curricular activities tend to have the highest impact on the education and careers of pharmacists in the US may take more longitudinal analysis. While these preliminary findings are helpful and an excellent first step in gaining insight into what students perceived to be beneficial co-curricular activities during pharmacy school, additional effort needs to be done using assessments such as this to inform co-curricular efforts for future pharmacy students.

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