

# Pharmacy students' perceptions of an active learning job-posting assignment and its role in career development

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## Abstract

**Introduction:** Career preparation is an essential element in a student's academic journey. Pharmacy curricula are required to cover this content, however the depth and breadth of support varies widely. This study investigates the effectiveness and impact of an Active Learning Job-Posting assignment on pharmacy students' perceptions of their career development and their interest in further career preparation activities.

**Innovation:** Students participated in an active learning activity during a pharmacy administration course related to career development. Anonymous, voluntary surveys were administered to 3rd-year pharmacy students following the activity. Descriptive statistics were completed.

**Findings:** Twenty-three students responded to the survey with 21 students (91%) reporting that the assignment encouraged them to review current real-world job postings and 18 students (78%) being open to further opportunities within the curriculum to explore and discuss the transition into the pharmacy profession.

**Conclusions:** Data showed that the active learning activity was received positively by students, but also highlights the need for more time on career planning and development.

**Keywords:** active learning, pharmacy education, workforce, career planning, career development

## Description of the Problem

Pharmacy curricula are essential in building clinical competencies while also supporting career preparation. As pharmacy students transition into the workforce, knowledge of existing job expectations is necessary. Reviewing real-world job postings can assist in understanding workforce requirements.

Career development, planning and counseling are requirements emphasized in the newly updated accreditation standards for pharmacy education, Standards 2025. Of the seven standards, three address career readiness. Standard 2, which is Professional Skills and Attitudes, states that "activities and experiences related to career development must be a part of the curriculum." Standard 4, which is Student Services, states "career-pathway counseling must be provided to students." Finally, Standard 5, which is Faculty and Staff Resources, covers faculty tasks and lists "career counseling."<sup>1</sup>

Prior data from the program indicated that career planning was an area for improvement. According to the 2024 Graduating Student Survey administered by the American Association of Colleges of Pharmacy (AACP), 11% of students disagreed or strongly disagreed that the school had provided guidance on career planning, with an additional 5.7% unable to comment. This question was the eighth worst performing question for the program and indicated an area the school must address in greater detail.<sup>2</sup> Previous studies have acknowledged the need for career preparedness and acknowledge this is a concern for students.<sup>3,4</sup>

Ives, et al. investigated career development services for pharmacy students and reported that an area students want more exposure to is the job searching process.<sup>4</sup> This study investigates student perceptions of an activity designed to support job searching with the goal of fostering discussion regarding career readiness and preparation support.

## The Innovation

As part of a pharmacy administration course, 3rd-year pharmacy students completed an active learning assignment that required them to create a pharmacist job posting. A central component of this activity was the required review of real-world job postings to promote student engagement with the tasks and responsibilities of the current workforce. To better understand pharmacy students' perceptions of career development and the role of job-related assignments within the curriculum, a survey was conducted. This survey aimed to explore whether completing a job-posting assignment contributed positively to career planning, student engagement

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with job search resources, and interest in further career-focused curricular activities.

The pharmacy program is a four-year, private professional program that aims to prepare graduates for diverse roles across pharmacy practice. The course was designed to introduce students to concepts in leadership development, organizational management, institutional management, pharmaceutical marketing and efficient resource allocation in professional pharmacy practice settings. Students participated in a didactic lecture of the integration of clinical and distributive functions for pharmacists; they then used this information along with information gathered from reviewing real-world job postings to develop their own pharmacist job posting.

A 60 minute didactic lecture was provided on the integration of distributive and clinical functions for pharmacists. The objectives of the lecture were to understand health care needs, recognize the advantages and disadvantages to integrating, and discuss the concerns with integration and recommend solutions.

To support career development, an in-class, group assignment, designed to help students assess current job expectations, identify how their goals align with current workforce needs and build skills to navigate from education to professional practice, was required. Following the lecture, students were assigned groups, divided into hospital or community focused practice. A sample job posting was reviewed with the students. To complete the assignment, students used information discussed in class and analyzed current real-world job postings which were identified via Indeed. Each group developed a job posting including: a brief overview, job responsibilities with a minimum of 5 bullets (including integration of clinical and distributive responsibilities), estimated pay, job-type (PRN, PT, FT), proposed schedule, education/License/Certifications requirements and work location (remote or on site). Discussions were generated based on the students' completed assignments. The discussion was meant to help students reflect about their career goals, compare practice settings and address real-world job expectations. Students were provided 45 minutes to complete the assignment and, although it was required, it was graded on a completion basis as it was intentionally designed to engage students and stimulate discussion on career development.

After completion of the assignment, an anonymous survey was sent to the students. The survey was voluntary and no incentives were offered. The survey was developed by School of Pharmacy faculty and administered using Google Forms. The survey consisted of six items with two true/false, three Likert scale questions, and one open-ended question. The three Likert scale questions asked students to rate agreement (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 =

strongly agree) based on their experience and perceptions. The open-ended question asked the students to elaborate regarding questions and concerns they may have with the process of entering the pharmacy workforce upon graduation.

Survey data was analyzed using descriptive statistics. Open-ended questions were evaluated qualitatively. This study was exempt by the Institutional Review Board (IRB#1587) of Shenandoah University.

### Critical Analysis

Forty students were sent the survey via email. Twenty-three students responded to the survey, resulting in a response rate of 57.5%. Twenty-two percent of the respondents had previously reviewed pharmacist jobs as part of the curriculum with 47.8% of respondents stating they currently subscribed to a job search website to receive notifications about future pharmacist opportunities.

All of the respondents agreed or strongly agreed that reviewing pharmacist job postings would help them determine their future career path in pharmacy, with all students agreeing (43.5%) or strongly agreeing (56.5%) that the job posting assignment encouraged them to regularly review job postings as they evaluate their career path in pharmacy. Nearly 80% of respondents agreed or strongly agreed that they would like more opportunities within the curriculum to explore and discuss transitioning into the pharmacist workforce. (Table 1)

An open-ended question asked students to share concerns they had about the process for entering the pharmacy workforce. Responses were grouped for similarities and fell into three categories: prior experience, availability and requirements. The first category focused on concerns over being able to attain a job without prior experience or very little experience. The second category focused on the requirements needed for a job placement, such as when and how to get licensed or if postgraduate education was required or just preferred. The third category included concern over the timing of when to apply for jobs, such as before or after taking the NAPLEX. Lastly, there were general concerns regarding the oversaturation of the job market and the ability to acquire a position in the specialty or with the desired benefits.

This study sought to initiate a simple, in-class, group assignment and to gather responses regarding the job-posting assignment. The results suggest that students viewed reviewing real-world job postings and the associated assignment as valuable components in supporting career development, planning and overall preparedness for entering the profession. In addition, this assignment, as well as the development of additional career planning and job searching assignments would be welcomed by students.

Additional assignments, like the one assessed here, could potentially help diversify job placements for students. Fitzpatrick et al, suggested that future research should be undertaken to investigate graduates' motivation to pursue different sectors of the pharmacy workforce. They found that half of the graduates they characterized had entered community practice, but one-fifth had changed their practice area since initially registering.<sup>5</sup> This study also discussed that most of their students had work experience in community practice and this is likely why most choose a career in that area.<sup>5</sup> Similarly, at our institution, the students who work during school often do so at a community pharmacy location. Enhancing the knowledge of a diversity of positions may be beneficial, especially given that respondents indicated concern over qualifications and minimal experience.

While this data provides some evidence of the need for additional focus on career planning in the curriculum and the need for additional research, the study does have several limitations. One limitation of the study includes the small sample size. In the future, as this assignment is continued, additional cohorts of students can be included so that the pooled data can be assessed. An additional limitation is having limited data on the 20% of respondents that indicated that they had been required to complete a review of job postings previously in the curriculum. Future iterations of this survey should gather data on the details of this exposure. Also, a limitation could be the potential bias of who chose to complete the survey. Individuals who chose to complete the survey may be more interested or have more experience with looking at job postings.

### Next Steps

Ideally, career planning is spread longitudinally throughout the curriculum so that students have multiple touch points during the program. The assignment occurred within a course that is part of a 3-course sequence spread across the second and third years of the program. Including one career planning assignment in each of the three courses could provide students with the repeat exposure. The school also has a professional development lab sequence that runs over all three didactic years. Incorporation of this material and several assignments could be shared in these courses as well. In addition, this cohort of students could be followed to see where they ultimately find a job and to assess if investigating job postings early changes the types of positions graduates seek.

### Summary

Career development is vital yet can often be an underemphasized component of pharmacy curriculums. Students viewed an in-class, group assignment as beneficial to their career development and were in favor of more career development opportunities within their curriculum. The findings support the need for further research and integration of career development throughout pharmacy curriculums with a focus on longitudinal implementation to better prepare students for the job market.

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**Table 1.** Responses to Likert-scale questions showing percent and number of respondents for each survey question

| Question  | Strongly Disagree % (n) | Disagree % (n) | Neutral % (n) | Agree % (n) | Strongly Agree % (n) |
|---|-------------------------|----------------|---------------|-------------|----------------------|
| "Reviewing pharmacist job postings as part of the pharmacy curriculum will help me determine my future career path in pharmacy."            | 0 (0)                   | 0 (0)          | 0 (0)         | 43.5 (10)   | 56.5 (13)            |
| "Completing the pharmacist job posting assignment encouraged me to regularly review job postings as I evaluate my career path in pharmacy." | 0 (0)                   | 0 (0)          | 8.7 (2)       | 60.9 (14)   | 30.4 (7)             |
| "I would like more opportunities within the curriculum to explore and discuss transitioning into the pharmacist workforce."                 | 0 (0)                   | 0 (0)          | 21.7 (5)      | 21.7 (5)    | 56.5 (13)            |