

SERVICE LEARNING

Introductory Practice and Service Learning Experiences in US Pharmacy Curricula

Sondra J. Peters, MBA, and George E. MacKinnon III, PhD

Midwestern University College of Pharmacy – Glendale

Submitted October 13, 2003; accepted December 17, 2003; published April 1, 2004.

Objective. To assess the implementation of introductory practice (IP) and service-learning (SL) experiences by United States schools and colleges of pharmacy.

Methods. A survey was developed and sent to 82 colleges of pharmacy.

Results. Thirty-eight colleges returned surveys, yielding a 46.3% response rate. Of the responding colleges, 84.2% required IP. Almost all of the respondents (90.9%) offered academic credit for IP, while 48.5% provided internship hours for IP. Students completed an average of 1.7 IP rotations. The majority of the respondents (54.1%) required SL for their students, while 21.6% provided voluntary SL experiences and 65.4% provided academic credit for these experiences. SL experiences were provided for students throughout all professional years.

Conclusion. The implementation of IP and SL in pharmacy curricula has been met with a wide range of interpretation and necessitates an ongoing dialog in academic pharmacy.

Keywords: Service-learning, introductory practice experiences, curricula

INTRODUCTION

The profession of pharmacy is changing from a focus on the provision of medications to the provision of pharmaceutical care.¹ The AACP Center for the Advancement of Pharmaceutical Education (CAPE) advisory panel developed a set of Educational Outcomes in 1994 and revised them in 1998 in order to provide a guide for pharmacy faculty as they implemented curricular changes that would produce professionals prepared to fill the evolving roles of pharmacists. These guidelines include professional practice-based outcomes that incorporate the concept of the provision of pharmaceutical care as well as general ability-based outcomes that address critical thinking, communication, ethical decision-making, social and contextual awareness, and social responsibility.¹⁻³

In 1997, ACPE revised their Accreditation Standards and Guidelines for the Professional Program in Pharmacy leading to the Doctor of Pharmacy Degree. In this revision, the ACPE guidelines included a breadth of experiential rotations including introductory practice experiences in order to “support growth in the student’s capabilities to render pharmaceutical care.” These guidelines stipulate that the Introductory Practice Experiences should incorporate “various practice settings during the early sequencing of the curriculum” and should be devel-

oped to provide “transitional experiential activities and active learning.”⁴

In 2001, the AACP Professional Affairs Committee issued a statement supporting the “development and maintenance of strong community-campus partnerships.” In this statement, the committee addressed the need to incorporate ambulatory care centers and the “community” into experiential education.⁵ The committee report addressed the need for the inclusion of community-based education in the pharmacy curriculum at institutions. The committee recommended that “continuums” of community-campus partnerships should be developed by colleges of pharmacy to encompass volunteerism, community-outreach, clinical experiential rotations, and service-learning courses. The committee suggested that service-learning could be a vehicle used to meet the American Council of Pharmaceutical Education accreditation standards for “early pharmacy practice experience and continuous patient contact in addition to advanced pharmacy practice experiences.” The committee defined service-learning as a form of experiential learning with the following attributes:

- Meets the actual needs of the community;
- Establishes a relationship between the community and the academic institution;
- Helps foster civic responsibility;
- Is integrated into the required curriculum;
- Provides structured time to reflect on the service experience;

Corresponding Author: Sondra J. Peters, MBA. Address: College of Pharmacy-Glendale, Midwestern University, 19555 N. 59th Avenue, Glendale, AZ 85308. Tel: 623-572-3520. Fax: 623-572-3550. Email: speter@midwestern.edu.

- Enhances what is taught in school by extending student learning beyond the classroom and into the community;
- Attempts to balance the service that is provided and the learning that takes place.⁵

While the committee encouraged the inclusion of the full continuum of community-campus engagement, they focused on the integration of service-learning in the pharmacy curriculum as a means to assist student mastery of the CAPE outcomes; specifically the general abilities-based outcomes. In addition, the committee suggested that service-learning would facilitate student acquisition of the “spirit of caring for patients, populations, and communities.”⁵

In 1997, Murawski, et al conducted an initial survey of schools and colleges of pharmacy and found that 17 of 41 (42%) responding schools offered service-learning.⁶ There have been no published surveys assessing the implementation of service-learning into pharmacy curriculum since 2001 when the AACP Professional Affairs Committee statement was released; although several reports in the American Journal of Pharmacy Education have described the development of service-learning programs at schools of pharmacy⁷⁻¹¹ as well as student perceptions of service-learning.^{12,13}

OBJECTIVES

In response to the CAPE Educational Outcomes and the changes in the ACPE Accreditation Standards, colleges of pharmacy have established introductory practice experiences and service-learning experiences. To assess the extent of adoption and manner of incorporation of introductory practice experiences and service-learning experiences in academic pharmacy, a survey methodology was proposed, the results of which are reported here. The survey was developed to accomplish the following:

- Determine the number of colleges of pharmacy that have implemented introductory practice experiences and service-learning experiences into their curricula.
- Identify in which professional year introductory practice experiences and service-learning experiences have been incorporated.
- Quantify introductory practice experiences and service-learning experiences.
- Determine whether students are receiving academic credit and/or internship hours for their introductory practice experiences and service-learning experiences.

METHODS

A survey was administered to 82 institutions in the United States identified from the AACP Roster of Colleges of Pharmacy.¹⁴ Surveys were mailed to the director

of experiential education and the chair/head of the department of pharmacy practice of each organization in September 2002. Duplicate mailings were used because in some academic programs the introductory practice experiences and service-learning experiences may not be coordinated by experiential education. Surveys were not mailed to the dean’s office as they would likely be forwarded to either the director of experiential education or the chair of the department of pharmacy practice. In addition to completing the surveys, each institution was asked to submit their respective syllabi for the introductory practice experience and service-learning courses. Due to the duplicity of the initial mailings, no follow-up mailing was sent to the nonresponding institutions.

RESULTS

There was a 46.3% response rate (38 of 82 colleges) to the survey, with no redundant surveys received. Of these respondents, 32 (84.2%) required an introductory practice experience, with students completing an average of 1.7 introductory rotations.

The professional year in which the 32 respondent institutions required introductory practice experiences varied by the institution with representation in each of the 4 professional years. Figure 1 details the percentage of respondents requiring introductory practice experiences in each professional year. Of the institutions requiring introductory practice experiences, 16 (48%) provided internship hours and 30 (90.9%) provided academic credit for the experiences (Table 1).

A review of the syllabi indicated that institutions requiring introductory practice experiences offered experiences that were activity-based (7 respondents) and observational (6 respondents) in nature. One institution provided both activity-based and observational experiences. Twelve programs placed students in both institutional and community settings, one placed students in a community setting only, and one placed students in an institutional setting only. Five programs combined service-learning and introductory practice experiences. Place-

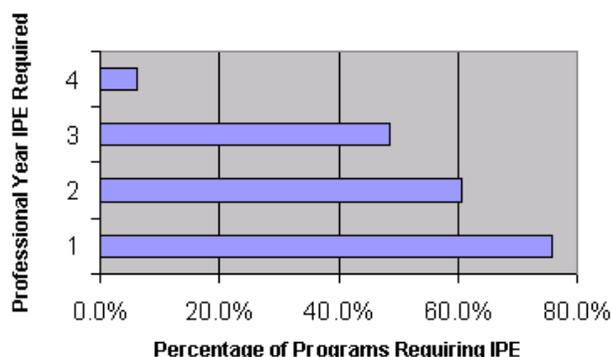


Figure 1. Professional year introductory practice experiences offered at United States colleges of pharmacy.

Table 1: Programs providing internship hours or academic credit for introductory practice experiences.

	1 st Professional Year	2 nd Professional Year	3 rd Professional Year	4 th Professional Year	Total for Any Professional Year
Number of programs providing internship hours	11	9	8	2	16
Number of programs not providing internship hours	14	11	8	0	17
Number of programs providing academic credit	23	18	14	1	30
Number of programs not providing academic credit	2	2	2	1	3

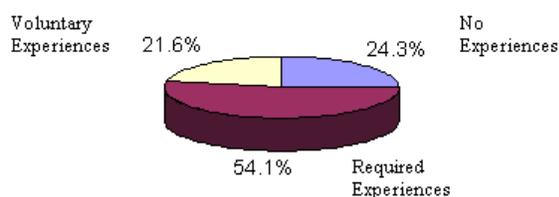


Figure 2. Service-learning experiences provided in US colleges of pharmacy.

ments for introductory practice experiences were both student selected and assigned by colleges.

Twenty-eight respondents (75.7%) provided service-learning opportunities either as a voluntary or a required experience (Figure 2). On average, students involved in service-learning activities spent 4.0 quarters or 2.3 semesters in service-learning related coursework. Service-learning experiences were offered at various points throughout the professional program (Figure 3), with the majority occurring the first professional year.

At 17 of the responding institutions (65%), students received academic credit for their service-learning, and at 14 of the responding institutions (53%), students selected their own service-learning experience. Twenty-one respondents (75%) indicated that their service-learning program included a reflective component.

Based on a review of the syllabi, service-learning activities were evaluated through written reflections (9 respondents), group discussion (6 respondents), essays (5 respondents) and preceptor/community partner assessments (4 respondents). Eleven programs placed students in a role outside of pharmacy for their service-learning and 7 placed students in a “pharmacy-based” role. Various objectives for the service-learning experience were identified and are listed in Table 2.

DISCUSSION

Academic pharmacy has responded to the ACPE call to incorporate introductory practice experiences and service-learning experiences into the professional curricu-

lum as evidenced by the 84.2% of responding colleges that require introductory practice experiences and the 75.7% that provide service-learning experiences. However, the extent and nature of introductory practice experiences and service-learning experiences vary dramatically among institutions. Likewise, integration of didactic coursework with these experiences varies.

Introductory practice experiences were reported in all 4 professional years, with the majority occurring in years 1 and 2. Although the letter accompanying the survey referred to the ACPE standards and guidelines for the definition of “introductory practice experiences,” it is unclear if some respondents reported all experiential rotations or limited their responses to include only introductory experiences. With 16 respondents reporting introductory practice experiences in the third year and 2 reporting introductory practice experiences in the fourth year, it is evident that there is some ambiguity and lack of consensus surrounding the term “introductory practice experience.” For example, the respondents may have considered the first rotation of an advanced series of fourth-year rotations an introductory experience. It may be necessary for the pharmacy education community and ACPE to further differentiate between “introductory” and

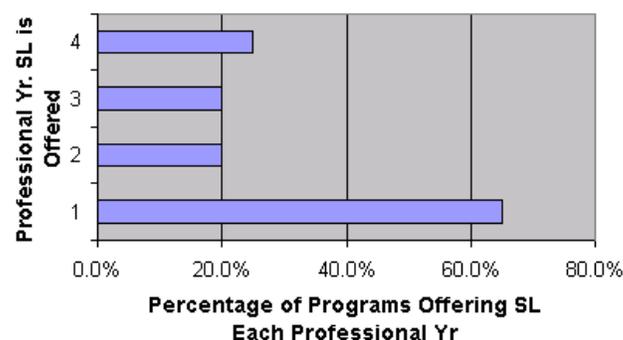


Figure 3. Professional year service-learning experiences offered at US colleges of pharmacy.

Table 2: Service-learning Objectives

Objectives	No. of Colleges Listing Objective
1. Improve communication skills	9
2. Develop citizenship	8
3. Provide community service	7
4. Develop professionalism	6
5. Increase awareness of contextual aspects of health	6
6. Gain a patient perspective of healthcare	5
7. Ethical Development	5
8. Increase cultural competency	5
9. Encourage reflection	4
10. Improve collaboration skills	4

“advanced” experiential rotations. Until recently, many colleges of pharmacy reserved the experiential component of the curriculum for the final year of study, leaving early experiences to only those students who actively sought them out. However, given the new ACPE Accreditation Guidelines, delaying experiences until the last professional year is no longer desirable.

Typically, introductory practice experiences do not focus on the development of technical skills, but instead focus on acquiring the behaviors, attitudes, and values of a healthcare professional.¹⁵ These goals make early introductory experience and service-learning experience compatible and make the option of combining experiences both viable and consistent without compromising either experience. Caution must be exercised in awarding pharmacy internship hours for these combined introductory practice and service-learning experiences, as they may not meet the guidelines of various state boards of pharmacy. As a result, the total amount of internship hours recognized for some graduates may vary on a state-by-state basis.

While the Murawski survey differed both in structure and method, their assessment yielded 41 responses (52.5%) with 17 (42%) of those responding indicating that they had some form of service-learning in the curriculum. Although the present survey produced a slightly lower response rate (46.3%), a higher number of respondents indicated that their program incorporated some level of service-learning (75.7%). This suggests that more institutions have begun providing service-learning experiences since Murawski’s work in 1997. It is not possible to determine the actual increase as both surveys had a relatively high number of nonresponders.

In the current survey, service-learning experiences ranged from self-selected, student-defined activities to carefully incorporated service-learning opportunities that were tightly integrated with didactic coursework. Most experiences included the reflective component as outlined in the 2001 AACP Professional Affairs Committee definition of service-learning, but only 51.4% of the institutions that offered service-learning required a service-

learning experience. The rest provided service-learning on an elective basis.

Service-learning is different from volunteerism in that it focuses equally on service and learning. There are 2 aspects of service-learning that address this balance. First, service-learning incorporates a reflective component. Second, service-learning integrates the service experience with a didactic component.

Reflection is often referred to as the “hyphen in service-learning.”¹⁶ Reflection assists students in transferring their service experiences and applying what they have learned to their academic lessons and profession. As Murawski noted, without the reflective component, the learning component is not optimized.⁶ Just as Murawski observed, this survey suggests that many colleges (25%) offering service-learning opportunities are still not incorporating the reflection component.

Specific learning objectives for each service experience further facilitate integration for the student.¹⁷ The development of clear learning objections for service-learning is difficult. When students self-select experiences, this development is even more challenging as faculty may not have a clear understanding of student activities. In addition, increased variability among service-learning experiences could be encountered when students self-select. However, establishing strong community partners with enough placements for every pharmacy student is both challenging and time consuming. Developing these partnerships is a process that cannot be achieved easily or quickly. This is an area in which many colleges of pharmacy may lack experience and expertise.

CONCLUSIONS

More effort is needed to further the transition from volunteerism to service-learning and to more fully integrate service-learning into the context of pharmacy curricula across the country. Likewise, faculty members and personnel in offices of experiential education must be engaged in the dialog at their respective colleges of pharmacy when the topics of service-learning and introductory practice experience are addressed. They must

ensure that the respective objectives of each experience are assessed and that these experiences are well integrated into the pharmacy curricula, while keeping in mind state board regulation for interns.

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