

# Service Learning: Survey of the Field: 1997 and 2003

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**ABSTRACT.** The authors surveyed the field in 1997 to determine the extent of utilization of service learning principles in the pharmaceutical education community. This manuscript reports the results of a follow-up survey consisting of the original survey and two additional items, performed six years later in 2003. A raw response rate of 55% of schools and colleges of pharmacy in the United States was achieved with the follow-up survey. Data were analyzed for the aggregate sample and for institutions that had responded to both surveys. The use of service learning was found to have increased substantially, both as a required and as an elective offering. A synopsis of qualitative responses is also presented. The authors conclude that service learning in some form has been adopted by a majority of institutions in the United States. The confluence between service learning, community engagement, and initial pharmacy practice experiences is also discussed. doi:10.1300/J060v14n02\_02 [Article copies available for a fee from The Haworth Document Delivery Service: 1-800-HAWORTH. E-mail address: <docdelivery@haworthpress.com> Website: <<http://www.HaworthPress.com>> © 2007 by The Haworth Press. All rights reserved.]

**KEYWORDS.** Service learning, pharmaceutical education, survey, curriculum, professional development

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## INTRODUCTION

Schools and colleges of pharmacy in the United States were surveyed in 1997 to determine the extent of utilization of service learning based instruction and to investigate the degree to which the concept was subject to differences in interpretation across institutions.<sup>1</sup> Based on personal communications with other academicians, we had reason to believe that the use of service learning in schools and colleges of pharmacy had increased since 1997. In addition, there have been anecdotal reports suggesting the concept, as practiced in pharmaceutical education, might be experiencing a certain degree of definitional drift from the classic Service Learning model. These considerations led us to conclude that a second survey, six years after the original, would be of utility to the pharmaceutical educational community.

Other researchers have also investigated the use of service learning in schools and colleges of pharmacy.<sup>2</sup> Nevertheless, we felt that reporting the results of this second survey is still of value because of our unique ability to combine the original 1997 data set with the most recent results, and our use of the same questionnaire format in both surveys.

## BACKGROUND

In 1997, we performed a survey of the schools and colleges of pharmacy in the United States in order to determine the state and intensity of adoption of service learning as a heuristic approach in pharmaceutical education, as reported in the *American Journal of Pharmaceutical Education* in 1999. The original intent of the survey was to assist the University of Mississippi School of Pharmacy implement service learning as effectively as possible by gathering background from other pharmacy education institutions.

The raw response rate achieved in the 1997 survey was 52.5 percent, and 17 of the responding institutions reported already having service learning in place. One finding was that service learning, while relatively widely adopted in name, often was being provided in a manner at considerable variance from promulgated service learning guidelines and definitions.

The purpose of the follow-up survey was to address the question of how things had changed in the interim. Our intent was to develop a greater understanding of the nature of the adoption of service learning principles across the pharmacy education community. Six years had

passed since the original survey, and service learning had apparently gained further recognition, based on manuscripts published in the *American Journal of Pharmaceutical Education* and the formation of a Special Interest Group (SIG) for Service Learning within the American Association of Colleges of Pharmacy.<sup>3-9</sup> Use of the original survey items would permit longitudinal analysis, allowing comparisons both within the cohort and even within individual colleges and schools. In addition, it was felt that the follow-up and comparison with previous responses would permit the examination of two additional issues—the persistence of service learning initiatives (if service learning had been continuously in place), as well as the duration (how long a service learning component had been in place). The wording of the original survey did not allow us to identify institutions which had previously had service learning in place but had decided, for whatever reason, to end such efforts (although one institution did report that they had done so). Similarly, we were unable to determine how long those institutions with ongoing programs had service learning approaches in place, and felt this information would be of value as well.

Therefore, our study objectives were to (1) compare and contrast the extent of adoption of service learning, (2) quantify the changes in application of service learning in the pharmacy education community between 1997 and 2003, and (3) explore the differences in persistence and duration of existing programs.

## **METHODS**

A survey packet consisting of a cover letter, a 13 item questionnaire (made up of the original 11 items from 1997 and two additional items that addressed persistence and duration), and a return envelope was mailed to selected individuals representing each of the 83 institutions listed as United States Schools in the 2002-2003 American Association of Colleges of Pharmacy roster which had currently enrolled students. The survey is presented in Appendix A. The packets were sent one month prior to the fall semester (last week of July 2003), with a follow-up mailing to non-responders one month after the beginning of the fall semester (last week of September). This timing was chosen in the hopes of insuring that the highest number of survey recipients would be on campus, and to attempt to work around the typically high work demands of the beginning of the semester, and so that the timing would also be reasonable for quarter-based systems.

The selection of individuals who would receive the questionnaire was performed in a different manner than for the original survey, where those who received the survey were chosen based on the authors' personal familiarity. One of the outcomes of extensive adoption of service learning has been the development of an American Association of Colleges of Pharmacy Special Interest Group in Service Learning (SL SIG). The existence of such a group of interested and motivated individuals (with more extensive abilities to network than achievable by the authors) meant the survey could be better targeted than otherwise would have been the case. The SL SIG provided a list of individuals at institutions across the country who were interested and involved in service learning at their institution.

With this additional information in mind, the original data was examined, and, for those institutions that did respond to the 1997 survey, a letter was sent to the original respondent. For those institutions who had not responded to the 1997 survey and for which a name appeared on the list provided by the SL SIG, that individual received the survey. For those institutions who did not respond to the original survey and for whom no name was provided by the SL SIG, the authors' familiarity was used to identify individuals who should receive the survey, or, as in 1997, was sent to the senior social and administrative sciences faculty member not in an administrative position. It was possible for the same person to be surveyed in 1997 and 2003 even though the institution in question may not have responded in 1997. Three addressees were "return to sender," and in these cases another recipient at the institution in question was chosen for a second complete mailing. A second mailing of complete packets was sent to non-respondents six weeks later.

Respondents were asked to respond for the institution, except for those items where their personal opinions were requested. We also completed a survey for The Purdue University School of Pharmacy and Pharmaceutical Sciences. Responses were entered into Excel for Windows, and then entered into SPSS for Windows version 12.0 for analysis.

## **RESULTS**

From the 2003 sampling frame of eighty-three, a total of 46 questionnaires were returned, for a raw response rate of 55%. Four of the respondents indicated they were not able to complete the survey, producing 42 usable responses and an adjusted response rate of 51%. Seventeen

schools that had responded to the 1997 survey also responded to the 2003 survey. Items 1,2,6,7,8,12, and 13 included quantitative (yes/no or categorical) responses, and all items except 1 and 12 included fields for qualitative (free text) responses. The survey instrument was identical to that used in 1997, except for the addition of items 12 and 13. The instrument appears in Appendix A. Quantitative results are summarized for the total samples of the 1997 and 2003 surveys in Table 1 for all quantitative items except the categorical responses to item 12 (which only appeared on the 2003 survey). Item 12 responses are summarized in Table 2.

Twenty-eight of the respondent schools (70%) said that they had a program in place that utilized service learning (Item 1), a substantial increase since 1997 (42%). Fourteen (38%) indicated their institution had a formal definition of service learning in place (Item 2), once again an increase from 1997 (23%). Fourteen of the definitions of service learning (45 percent) either provided or referenced by respondents included reflection as a distinct component of service learning.

When asked to qualitatively describe barriers to service learning (Item 4), there were 27 responses. The responses, across institutions, consistently identified many of the same issues. These can be roughly categorized as attitudinal and structural. Attitudinal barriers had to do with a lack of acceptance on the part of administration, faculty, and, in a few cases, students, some of whom did not appear to perceive the relevance of the service learning experience to their professional develop-

TABLE 1. Frequency and Percent of Responses, Quantitative Responses for 1997 and 2003 Service Learning Surveys, All Respondents

Item	1997 (41 respondents)	2003 (42 respondents)
Does your School or College have any program in place which utilizes Service Learning?	Yes - 17 (42%) No - 23 (57.5%)	28 (70%) 12 (30%)
Does your School or College define Service Learning?	Yes - 9(23.1%) No - 30(76.9)	Yes -14(37.8%) No - 23 (62.2%)
Is there any follow up to those initial experiences in later years?	Yes - 9 (50%) No - 9 (50%)	Yes - 15(45.5%) No - 18(54.5%)
How do your students seem to respond to the program? (overall positive or negative)	Positive 15 (93.8%) Negative 1 (2.2%)	Positive 28(96.5%) Negative 1 (3.5%)
Does your institution have any elective opportunities for service learning?	Yes 11 (37.9%) No 18 (62.1%)	Yes 23 (60.5%) No 15 (39.5%)

TABLE 2. 2003 Responses to Item 12, How Long Has Service Learning Been in Place at Your Institution?

Duration of Program	Frequency	Valid Percent
Zero	6	16.7
1 yr	5	13.9
2 yr	2	5.6
3 yr	4	11.1
4 yr	5	13.9
5 yr	6	16.7
6 to 8 yr	6	16.7
9 to 10 yr	1	2.8
10 plus yr	1	2.8
Missing	10	
Total	46	

ment. For example, students' negative perceptions primarily are that they do not see its relevance and that they are too busy. Structural barriers primarily had to do with finding time, either in the curriculum or to manage multiple sites and students. Community partners also played a role in attitudinal (seeing the students as volunteers instead of learners) and structural (finding an adequate number of good sites) issues.

In the 1997 survey, the consistent barriers mentioned were time, resources, and administrative/faculty support. Our interpretation of the qualitative barriers noted in the two surveys would be that, while the issues described were very similar, there does appear an emergence of site and community aspects of barriers that reflect problems with scaling up service learning programs to handle larger numbers of students.

Thirty-three institutions chose to respond to the item inquiring about service learning experiences required of students in the first two professional years (Item 5). Six indicated there were no required service learning courses in the first two years. Of the remainder, responses varied widely. Responses included: a requirement for students to perform service (learning is optional) to partnering with individuals needing health care, to involvement in service projects as a component of Initial Pro-

essional Practice Experience (IPPE) programs, to structured, one, two and three credit courses, to a maximum in one case of a requirement of thirty-two hours of service learning orientated experience in the first three years of the professional curriculum, with a minimum of eight hours per year spent in reflective sessions. It should be noted that approximately one-third of the required activities (for example, “brown bag” sessions for elderly patients without opportunity for reflection) described would, by strict definition, not constitute service learning. A number of respondents (47%) indicated that there was some form of follow-up to the initial service learning experiences that occurs later in the curriculum. In terms of qualitative responses, 19 respondents provided input about the degree of follow-up, if any, beyond any required experience. Several schools indicated the students are surveyed yearly thereafter. Others indicated the required course in place at their institution continues throughout the professional curriculum or as an extension of the IPPE. The bulk of respondents indicated that any follow up was provided via the mechanism of service learning electives being offered later in the curriculum.

More than 96% of respondents indicated that their students found the service learning experience to be “overall positive.” Qualitative responses to this item were provided by 23 schools; the vast majority of schools reported positive student attitudes. Although students’ initial feelings were often reported as being negative, most reported that this initial resistance disappeared over time. Several respondents indicated that there was a small (5 percent or less by one report) group of students who were resistant to service learning and did not seem to ever be likely to “get it.” There was some concern expressed by students about managing their time in an already busy schedule to make the program work, and in one case the response indicated students did not perceive the benefit service learning might provide to their professional development. A positive mentioned by several respondents was students’ perception that service learning experiences allowed them to provide a professional contribution earlier in the curriculum than might otherwise be the case.

Sixty-two percent of respondents indicated that service learning elective opportunities were available at their institutions. There were 27 qualitative responses. Results were mixed; some institutions offered only elective courses. Several indicated service learning electives were available, but largely outside the pharmacy program. Electives as an extension of a core requirement in service learning with the school or college of Pharmacy appeared to be relatively rare.

When asked what, if anything, contributed to the smooth running of the program, thirty-one respondents provided qualitative responses. The theme of most responses was an issue of commitment—by faculty (effort and time), by administration (resources, dedicated personnel, championing the concept), and by community partners, in that order of frequency.

When asked what they would avoid, 25 respondents provided some qualitative response. The content could be described as a series of potential pitfalls, or, when considered as a series of “what we should have done was . . .” statements, becomes a fairly straightforward description of how to implement service learning. First, start small, with an elective offering. Take the time to build support with administration and the faculty for the approach to gain sufficient time and/or resources to support the program. Work on identifying a manageable number of community partners other than traditional hospital and pharmacy settings that can work within the concept and provide a safe and structured learning opportunity for the student. Make sure the students’ objectives are clear and well-documented. Be sensitive to scheduling issues for the students; but at the same time, do not allow participation to be voluntary or semi-voluntary. Be cognizant of regional limitations; required programs may not be possible in certain areas where class size exceeds the availability of quality sites.

Finally, when asked about ideas for setting up a program to make it as effective as possible, the 25 qualitative responses had three preponderant themes—the need for a dedicated personnel slot for the program’s administration (either a faculty member or an administrative assistant), the need for development and selection of sites in the community prior to initiation (not student selected opportunities), and the need to provide clear, objective goals to everyone involved.

### *Longitudinal Analysis*

As we used the same core survey in 1997 and 2003, it was possible to examine the quantitative results for those schools who responded to both surveys. Eighteen schools did so, and their responses are summarized in Table 3. Briefly, adoption of some form of service learning within this group rose from 44 to 75 percent, use of a formal definition rose from 19 to 38 percent, follow-up increased from 50 to 71 percent, and elective opportunities increased from 36 to 58 percent. Institutions reporting that the response of the students were “overall positive” remained stable at nearly 100 percent. Qualitative differences were not examined for this sample.

TABLE 3. Frequency and Percent of Responses, Quantitative Responses for 1997 and 2003 Service Learning Surveys, Schools Responding to Both Surveys

Item	1997	2003
Does your School or College have any program in place which utilizes Service Learning?	Yes - 7 (43.8) No - 9 (56.3)	Yes - 12 (75.0%) No - 4 (25.0%)
Does your School or College define Service Learning?	Yes - 3 (18.8%) No - 13 (81.3%)	Yes - 6 (37.5%) No - 10 (62.5%)
Is there any follow up to those initial experiences in later years?	Yes - 3 (50%) No - 3 (50%)	Yes - 10(71.4%) No - 4( 28.6%)
How do your students seem to respond to the program? (overall positive or negative)	positive 7 (100%) negative 0	positive 13(100%) negative 0
Does your institution have any elective opportunities for service learning?	Yes 4 (36.4%) No 7 (63.6%)	Yes 10 (58.8%) No 7 (41.2%)

### *Additional Items*

Two items were added to the 2003 survey that did not appear on the 1997 survey. Items 12 and 13 inquired about the duration of the service learning program and asked if service learning has been discarded at that institution.

Four institutions (12%) indicated a service learning course has been offered in the past but was not available at this time. Of the four, one reported re-implementation had already occurred (apparently to indicate SL was offered, dropped, and re-instituted), one reported that re-implementation was in the planning stages, and the third reported that while the formal service learning class no longer existed, the general principles were being instituted across the IPPE program. In 1997 only one institution indicated in a qualitative response that service learning had been at place at one time but was no longer active due to funding issues. The results for Item 12, which asks how long a program may have been in place, are reported in Table 2.

## *DISCUSSION*

There are some limitations to a survey of this nature. First, potential respondents were not selected randomly (also a limitation of the 1997 survey). The changes in the selection process utilized in the 2003 survey

do introduce an additional consideration. Given the input of the Service Learning SIG, it seems reasonable to assume that the 2003 sampling process was to some extent more successful in identifying individuals at some institutions who were both better informed and more interested than those individuals chosen according to the approach used in the first survey. In theory, this might lead to systematically biased observed differences in most items, in the absence of any real, "true" change, due to differences in perspective, knowledge, or attitude. It is not, however, possible to estimate the actual magnitude of this potential effect, and so we must caution the reader to take this into account when considering the results. Also, as in the prior survey, we surveyed individuals, not the institutions. Differences between one individual's perception and actual conditions at the respondent institutions may in some cases differ.

The longitudinal data set is also subject to this effect, because the individuals surveyed at the institutions do, in some cases, differ. Nevertheless, we feel that the data is especially valuable in assessing the change in utilization of service learning.

The raw response rate for the 2003 survey of 55% (slightly better than the 1997 survey's raw response rate of 53%) is not so high as to preclude the possibility that the results reported here are not actually representative of the pharmaceutical education community. It is interesting to conjecture whether the response rate might have been higher had not this same topic area already been surveyed by other researchers immediately prior to this survey. Also, as before, our interpretation of the qualitative results must include our innate biases in this area.

For purposes of assessment we utilized Jacoby's definition of service learning components.<sup>10</sup> That is, for programs to constitute service learning in a strict sense, they should include the four principle components of Jacoby's definition—activities that address human and community needs, which occur in structured opportunities, are intentionally designed, and include reflection and reciprocity.

It is the last component, reciprocity, and especially reflection that seem most often to be missing in the programs that fall short of full implementation of service learning. In our own service learning experience, a reflection session occurring after the loss of a patient with whom a student was working can function much like an intense group therapy session. It may well be that one reason reflection is used sparingly is that the pharmacy faculty may not often include individuals with the requisite expertise necessary for such circumstances.

## **CONCLUSIONS**

With due consideration of the limitations discussed above, given the magnitude of the observed differences, it seems reasonable to conclude that the rate of utilization of service learning has increased substantially in schools and colleges of pharmacy in the United States since our 1997 survey. Some of this increase can be attributed to increases in the availability of elective opportunities; however, the increased numbers for elective opportunities do not fully explain all increases (Item 1) suggesting an increase in required courses utilizing service learning as well.

In general, where adopted, service learning has been well received. In the few instances where service learning was adopted and then discontinued, resource limitations were described as a key issue, rather than dissatisfaction with the effectiveness of service learning. Three of the four institutions where service learning had been discontinued were in the process of re-implementation.

For institutions that have adopted service learning, the experience seems to have been quite positive, with increases in utilization across the curriculum, increases in understanding and sophistication of use of service learning principles, and commitment to the approach. This is especially evident in the longitudinal data where substantial increases occurred in every quantitative response except students' overall response to service learning, which was already overwhelmingly positive. In addition, despite initial attitudinal barriers and the apparent existence of a small percentage of students for whom service learning experiences will never be entirely positive, respondents reported that the vast majority of students found service learning experiences to be positive and rewarding.

The similarities between student and institutional initial and post-experiential attitudes towards service learning are striking. Barriers, initial misunderstanding, uncertainty, and distrust were reported for both students and institutions. When these issues are overcome and service learning is implemented at the institution, or the student embarks on his/her service learning experience, the evidence suggests that the outcome is almost universally positive and rewarding.

While the parallels between the student and institutional experience might suggest a benefit from service learning for all concerned, a word of caution would seem prudent. Students and the institutions they attend derive different benefits from the adoption of service learning, in part due to service learning's inherent extramural nature. For the student, the

singular benefit of self-discovery and appreciation of the professional care-giver's role is self-evident and has been well documented elsewhere.<sup>11-16</sup> We believe these benefits are maximized when classic service learning principles are utilized (especially the key concepts of opportunities for discussion and reflection). However, for the institution, there are benefits beyond thorough preparation of the student for professional practice which accrue. In particular, two underlying themes were evident in the qualitative responses regarding implementation of service learning within the pharmaceutical education community—community engagement and the initial pharmacy practice experience.

At a number of institutions service learning is seen as a relatively easy method for providing students with an initial pharmacy practice experience at relatively low cost in terms of resources. These resources (especially pharmacy-related practice opportunities) are in short supply at most institutions due to requirements for practice rotations later in the curriculum. This is not a negative, *per se*. In fact, it is conceivable that it can be quite positive if students are allowed to confront the realities of direct (albeit non-pharmacy) patient care early in their educational experience, so that they may discover that a career involving direct patient contact may not be for them, should that be the case.

However, the use of service learning for meeting Initial Pharmacy Practice Experience (IPPE) needs can become a negative if students are sent to provide services without the requisite structure, guidance or opportunities for discussion and reflection. In such circumstances, the institution may benefit by meeting requirements with relative ease. The students' benefit, however, may be sub-optimal.

Schools and colleges of Pharmacy face an increasingly resource scarce environment. The concept of engagement with local communities is seen as a means of addressing some of the classic "town and gown" issues, as well as a means for garnering legislative (and therefore fiscal) support. It is easy to envision circumstances where students are sent out to provide services that will ultimately benefit the institution. The benefit to the student is, again, less clear.

Our concern, for both the initial pharmacy practice experience and engagement with the community, is the evidence in our data that in some cases there seems to be service without learning. Should this be the case, the student's educational experience is sub-optimal; or, the student is at risk for being subject to exploitation. Whatever the circumstance, the student is likely to be less than pleased to pay for the opportunity to provide service to others without some explicit educational

benefit. We caution, therefore, that to avoid these problems, it is crucial to maintain the learning component of service learning.

Never the less, it seems clear that Pharmacy may have a different perspective on service learning than, for example, schools of engineering or the humanities. The precepts of service learning must have a unique interrelationship with the development of students whose chosen career goal is to become health care(ing) professionals. This, and Pharmacy's differences from the other health professions suggest that Pharmacy's vision of service learning is likely to be unique as Pharmacy itself.

These issues suggest future directions for research. Given the widespread and growing adoption of service learning within Pharmacy education, it seems reasonable to explore two key questions about service learning. First, what is the outcome of the service learning experience? Specifically, how do practitioners who, as students, have had a service learning experience differ from those who have not? Are they more effective clinicians? Do they find their profession more satisfying or rewarding? Are they better pharmacists? Second, to what extent do the effects discovered in answering the first question differ in intensity corresponding to the degree to which classic service learning principles are adhered to in the student's experience? Do extensive opportunities for discussion and reflection result in more profound effects, or is a cursory service experience sufficient? Experience outside pharmacy, as reported in the literature, suggests the answer to the second question to be "yes."<sup>17-19</sup> However, the application of service learning within Pharmacy entails unique considerations.

These questions pose formidable methodological challenges, the addressing of which will likely require participation of many schools and colleges of pharmacy. But it should prove worthwhile, because, based on the trends seen over the past six years, service learning will be a part of the pharmaceutical educational community for some time to come.

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APPENDIX A

SERVICE LEARNING SURVEY  
Purdue University School of Pharmacy

1. Does your School or College have any program in place which utilizes Service Learning?  
Yes No
2. Does your School or College define Service Learning?  
Yes No  
Please provide your School or College's definition of Service Learning below. If your institution does not formally define service learning, please provide YOUR definition of Service Learning.
3. If your institution utilized Service Learning in the past but no longer does so, why was the program discontinued?
4. If your institution attempted to utilize Service Learning in the past or is doing so now, what barriers to implementation did you discover?
5. What Service Learning activities, if any, are *required* of your students in their first two years of professional education?
6. Is there any follow up to those initial experiences in later years? If yes, please describe them.  
Yes No
7. How do your students seem to respond to the program? (Positive Negative)
8. General observations  
Does your institution have any elective opportunities for service learning? If yes, Please describe.  
Yes No
9. If your institution has a program up and running, what do you feel contributed the most to making it run smoothly?
10. If you were setting up a Service Learning program at your institution today, what things would you avoid?
11. What ideas would you care to offer about setting up such a program to make it as effective as possible?

12. How long has/was Service Learning been in place at your institution?

0 year	3 years	6-8 years
1 years	4 years	9-10 years
2 years	5 years	more than 10 years

13. Have you had a Service Learning initiative in place in the past that is now inactive?

Yes No