University of Utah College of Pharmacy  
Educating Patient-Centered Pharmacists  

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PROJECT OVERVIEW

The focus of our SL project Educating Patient-Centered Pharmacists was on institutionalizing SL at the University of Utah College of Pharmacy (Utah) and Purdue University School of Pharmacy (Purdue) through permanent curricular revision. The project, a collaborative effort between Utah and Purdue, was sponsored in part by Health Professions Schools in Service to the Nation (HPSISN).1

Project Goals

- Enhance the students’ experiences of their professional role;
- Fulfill unmet community needs;
- Educate community-centered, caring pharmacists by helping them develop their own understanding of “being in service” (working with someone), as opposed to “providing service” (doing to someone);
- Develop community-campus partnerships that would expand the capacities of all members, including students, faculty, community partners, and agency clientele.

Project Objectives

The project’s objectives were developed before funding was received from the HPSISN Program. They address initiatives related to the community, the student participants, and the academic institutions.

Community

- Positively impact the lives of home-bound elderly through companion programs designed to foster mutual dependence and understanding; and
- Provide pharmacy school support to community social service agencies whose clients have unmet medication-related needs.

Student Participants

- Provide a “caring” foundational experience to instill the values and ethics of treating people as both humans and individuals;
- Further develop students’ abilities, including oral and written communication, self-learning, and group interaction skills;
- Help students develop sensitivity in response to persons who are different than they, in terms of culture, economics, disability, or other reasons;
- Increase the students’ experience with and commitment to humanistic aspects of caring for patients, social awareness of health-related issues, and civic involvement in general; and
- Help students understand the important interrelationship of social services and social support to the health

1While Purdue will be mentioned in this case study, the focus will be on Utah, as the official recipient of the HPSISN grant.
care efforts and effectiveness of an individual or family.

**Academic Institutions**
- Create ongoing partnerships between Utah and Purdue and their communities to alleviate community members’ unmet health and companionship needs;
- Facilitate curricular change via two faculty development workshops; and
- Provide an opportunity for pharmacy majors to participate in the University of Utah’s undergraduate SL Scholars Program.

**SL Defined**

SL is a course-based, experiential learning pedagogy in which community service is integrated into academic coursework. Both colleges followed the Criteria for Designation of SL Classes developed by the University of Utah’s Lowell Bennion Community Service Center, based on the Wingspread Principles of Good Practice:
- Students provide needed service;
- Service experience relates to subject matter of course;
- Course activities provide method for students to think about what they learned through service experiences and relate what they have learned to course subject;
- The course offers methods to assess learning derived from service;
- Service experiences recognize the recipients’ needs and offer opportunities for recipients to be involved in evaluation of service;
- Service opportunities are aimed at civic education development;
- Knowledge from discipline informs service experiences;
- The course offers opportunities to learn from other class members; and
- Course options ensure that no student is required to participate in a service placement that creates religious, political, and/or moral conflict for them.

**ADVISORY COMMITTEE**

Utah’s SL Advisory Committee (SLAC), comprised of all Utah faculty in the project, teaching assistants from each of the SL designated courses, two students from each professional year of the pharmacy program (six total), and a representative from each community agency (seven total from six agencies), met on a quarterly basis to evaluate effectiveness of the project. Effectiveness was assessed by how well the objectives were met for the students, community, and the academic partner. Although the SLAC did not conduct a formal evaluation of the Utah program, results from student surveys, course evaluations, and Lowell Bennion Community Service Center SL course evaluations were shared. Other important information regarding upcoming meetings, faculty development opportunities, and curricular issues also were discussed. The open atmosphere of meetings and the relationships between faculty and community partners encouraged participant-input into issues relevant to the needs of both the academic program and agency goals. Of particular importance to students was the ability to understand the relevance of both subject matter and service experiences. This pushed the SLAC to remain focused on short-term program improvements, as well as on issues of long-term sustainability and growth.

Agency representatives included, from Salt Lake County Aging Services, Dixie Haslip, staff member, Volunteer Support Services Program; Carolyn Hunter, program manager, RSVP and Volunteer Support Services Program; and Carol
Dixon, staff member, Healthy Aging Program; from the Housing Authority of the County of Salt Lake, Sherrie Rico, building manager; from Community Nursing Services, Tillie Young, Education Department; from the American Diabetes Association of Utah, Charles Hand, executive director; and from LifeCare Services, Kim Sutherland, program manager.

KEY PERSONNEL
Key personnel for Educating Patient-Centered Pharmacists have been the project’s co-directors, Nancy A. Nickman, associate professor of pharmacy practice and Presidential Teaching Scholar (Utah), and Robert K. Chalmers, associate dean and professor of pharmacy practice (Purdue). They met through the American Association of Colleges of Pharmacy’s “Focus Group to Liberalize the Professional Curriculum,” of which Dr. Chalmers was chair. Through this collaborative committee work intended to “liberalize” pharmacy curricula through the integration of liberal arts coursework and philosophy, Drs. Chalmers and Nickman found many common interests related to liberal arts and the education of health professionals. They were comfortable working together on projects over long distances and in two separate university environments. In addition, since Dr. Nickman had been working in SL for three to four years by the time the HPSISN project started, Dr. Chalmers could benefit from her earlier experiences and not have to start the Purdue program from scratch. In the reverse manner, Dr. Nickman and the Utah program benefited from Dr. Chalmers’ extensive background in education evaluation and curricular revision and reform. In this manner, the relationship was equally challenging and beneficial for both parties and programs. Over the course of the HPSISN project, their each visiting the other’s campus strengthened their relationship.

PROJECT PERFORMANCE
Curricular Integration of SL
Two required courses at Utah and two permanent elective courses at Purdue were developed in 1995 to accomplish the project’s goal of integrating SL as a pedagogical method of making coursework relevant to civic involvement, humanistic care of patients, and social awareness of unmet medical needs. The two Utah courses, offered to first professional year (P1) and third professional year (P3) students in the colleges’ undergraduate pharmacist educational program, were:
• Social Foundation of Pharmacy Practice (PhAD 535), 50 P1 students, taught by Nancy Nickman; and
• Community Practice (PhPre 527), 50 P3 students, taught by Laura Shane-McWhorter.

SL Assessment Methods
Both courses at Utah used a number of assessment methods as part of the regular grading of assignments that challenged students to think about and learn from their SL experiences. Reflection sessions led by community service agency representatives were utilized to help students make sense of what they were seeing and experiencing in the community. Students also were asked to write various papers as graded assignments that required them to synthesize experiences with classroom
material. Some of these assignments (with the students’ knowledge and consent) were shared with agency partners so that feedback and revision of the program could occur where necessary. Teaching assistants assigned by the department chair had previous experience with SL courses and, in some cases, had taken these courses as undergraduates in the professional program.

**SL Activities**

For both P1 and P3 students, agency placements lasted a minimum of ten weeks (the length of the academic quarter). In some instances, students opted to remain working with agencies past the time allowed by the academic schedule, in essence continuing as volunteers of these agencies at their own initiative.

- **Homebound Companionship Project.** The SL activity for P1 students involved their working in pairs (Utah) or singly (Purdue) as companions to the homebound clients of a variety of social and human service agencies. Twenty-five pairs of Utah students’ met with clients of the Housing Authority of the County of Salt Lake, Community Nursing Services, and Salt Lake County Aging Services.

- **Unmet Health and Medication-Related Needs Project.** P3 students were matched (either in teams or individually) with a number of social and human agencies to help resolve unmet health and medication-related needs among their clientele. Around fifty Utah students spent over 500 hours per quarter with clients of the Housing Authority of the County of Salt Lake, Salt Lake County Aging Services Healthy Aging Program, LifeCare Services, and the American Diabetes Association of Utah.

Faculty developing courses and activities for P1 students—who had no drug or medical knowledge but were “great human beings”—hoped that companionship experiences placed early in the curriculum would serve as reminders to students when they began their pharmacy practice that they were dealing with people as human beings first, and as patients second. They assumed that the companionship portion of any medical/pharmaceutical encounter was at least as important as the medical encounter itself. For example, when students conduct brown bag sessions for the Healthy Aging Program, seniors may have attended because they were truly interested in having someone look through the barrage of medications often kept in their bathroom medicine cabinet. More often than not, though, seniors struck-up conversations with students on subjects other than medications, while students initially were more focused on the process of cataloguing and describing the various medications. These same behaviors on the part of seniors were observed under other circumstances, such as during the focus groups on medication and health issues conducted for the Housing Authority of the County of Salt Lake in a low-income senior high-rise. For example, during the first year of the Utah HPSISN project, P3 students noticed that attendance was appreciably low. Two students developed a diabetes bingo game to be played while learning about the effects of diabetes and medication compliance. This tactic dramatically increased not only attendance, but also improved relationships between seniors and students.
PROJECT ACHIEVEMENTS

The HPSISN project at Utah met great success. Student evaluations of both SL courses are included as an appendix to this case study.

Objectives for the Community
The P1 course Social Foundation of Pharmacy Practice met its community objective to provide companionship for homebound elderly. The P3 course Community Practice not only accomplished the objective it had been designed for (to provide support and information to community members with unmet medication-needs) it also met at least one objective (to provide companionship to the homebound) that it had not been designed to meet. During focus groups, brown bag sessions, and other course-specific activities, it became apparent to students, faculty, and community partners that the companionship portion of the activity was as important as the medicine-related information being provided by students. For example, one student commented, “I think the experience I had will stick in my mind for a long time—much longer than any research topic. The best part of the experience came when I was delivering food boxes [for LifeCare Services]. One older lady was so kind and had us sit down to talk with her. When we got up to leave, her eyes teared up and she thanked us so much for bringing the food. She said we’d never know how much it meant. I knew the service I gave was really needed and that made me feel good about the time I had spent...The most important thing I learned was that I might not have all the answers, but it’s more important for me to be able to have a trusting relationship with patients and be able to refer them to the agencies that can provide more help. It is quite clear that a pharmacist can and should play a much broader role in a patient’s health care than just providing the correct medication.” Similar comments have been made over the course of the program about both companionship and information-directed experiences.

Objectives for Student Participants
During their experiences, students learned about community agency organization, mission statements, and funding issues. They became aware of social agencies and networks that could help their patients. One student wrote that she had always volunteered, although not in the area of pharmacy practice, and she now knew where to turn to provide her “professional volunteerism.” Another student commented that she had an increased awareness of the amount and need of community agencies serving diverse cultures; referring to a specific subculture, she wrote: “As non-citizens, some elderly are at risk of being denied their rights to welfare and associated medical benefits. This sub-component [of community agencies] helps these elderly attain the language skills necessary to become citizens of the United States.”

While changes in students’ attitudes toward their commitment to humanistic aspects of patient care, social awareness of health-related issues, civic involvement, and the interrelationship of social services and support to health care have not been formally assessed, anecdotal evidence suggests that positive change did occur for some students.
However, it is unclear whether these changes are temporary or permanent. As an example, three 1996 graduates of the College of Pharmacy who participated in SL set up brown bag sessions at their individual institutions (two community pharmacies and one hospital pharmacy) during National Pharmacy Month in 1997 to mentor current pharmacy students. This activity appeared to represent a more long-term change, which may or may not be related to their participation in SL.

Objectives for the Academic Institution

Ongoing community-campus partnerships have been created that alleviate community members’ unmet needs. Students and faculty continue to work with seven individuals from six community agencies. Representatives of Utah and Purdue presented a faculty workshop on SL at the 1995, 1996, and 1997 meetings of the American Association of Colleges of Pharmacy (AACP). Presentations also have been conducted at the 1996 and 1997 annual meetings of Community-Campus Partnerships for Health (CCPH). In addition to a number of manuscripts in various stages of publication, both schools anticipate continued development of course materials and scholarly works as a result of being part of the HPSISN Program.

Dr. Nickman has continued to promote the SL Scholars Program to pre-pharmacy majors in a required introductory pharmacy survey course and professional program students. To date, however, no student has elected to follow this graduation option.

COMMUNITY PARTNERSHIPS

Partnership Development

All agency partnerships were developed as faculty searched for agencies with existing programs that could benefit from pharmacy student participation. Obviously, the needs of pharmacy students in terms of the curriculum also were considered. For example, several of the agencies were focused primarily on providing social and human services for senior citizens. Relationships with these agencies were developed to provide students with longer-term companionship experiences.

One key aspect in building these relationships was the faculty’s willingness to learn about the community partners’ various roles in helping citizens to maintain community independence. In addition, faculty needed to be willing to work with these same agencies to develop a SL program that satisfied not only unmet needs on both sides of the community-academy coin, but also served to enlarge the assets and capacities of all partners in the group (students, faculty, and agency personnel and clients). In the Utah HPSISN project, the community partners have been equal participants, with the university facilitating the relationships between students and clients. At times, this has meant providing something as simple as a parking pass for an agency representative who was driving to the University of Utah for a reflection session with students. At other times, this has meant being willing to participate in agency meetings where the merits and difficulties of working with clients are discussed.

Students also played a role in
community partner development. Faculty set the example for how partnerships are developed and maintained over the long term. If faculty were not patient and respectful in the partnership development phase, then students had no reason to believe that their behavior should be any different. SL, as a pedagogy, is entwined in the reciprocal nature of service. As such, to the extent that students and faculty are able to remain respectful and remember their role as guests in the homes of community agencies and clients alike, partnering relationships should continue to flourish.

Partnership Maintenance
Representatives from the agencies that have worked with the SL project for at least two years are offered the opportunity to apply for appointments as clinical track faculty at a rank appropriate for the individual. At the present time, all community agency representatives hold the rank of clinical instructor in the Department of Pharmacy Practice, except for Tillie Young, who holds the rank of clinical assistant professor, due to her advanced degree. Faculty and administration of the Utah project feel that this was an important evolutionary step in recognizing the valuable contributions that community partners made to the success and institutionalization of the SL project for both the university and the agency.

Partnership Sustainability
The individual relationships between faculty and agency personnel support continued development. These relationships are the key to survival in the long run. Otherwise, SL will become just another educational fad that politically and bureaucratically will run its course.

Community Agency Participation
Community agency personnel conducted student orientation to the agencies, co-monitored student progress with course and community service objectives, and participated in multiple reflection opportunities for students as part of the courses.

PROJECT EVALUATION
The accomplished goal of evaluation for the Utah HPSISN project was to develop useful measures of what did and did not work in terms of program design, development, implementation, and sustainability.

Evaluation Methods
A number of different feedback methods regarding ongoing development and improvement of the program were implemented. The primary evaluation methods were student course assignments, student and Bennion Center course evaluations, SLAC meetings, and individual meetings between course faculty and community partners. Changes in students’ sensitivity and commitment to persons in need and their understanding of the importance of social services to support an individual or family’s health care efforts were formally assessed both pre- and post-course using a survey instrument developed by Purdue. Community partners led reflection sessions in both courses on a regular basis, bringing the community perspective into the classroom. During the sessions, the agencies and students
shared evaluation and feedback. Faculty and teaching assistants also attended these sessions, allowing for full participation. Issues that arose in reflection sessions also were discussed and resolved at SLAC meetings. To some extent, community partners also started evaluating client satisfaction with the project, although no data are yet available.

This program received its only site visit from the HPSISN office during October 1996. The members of SLAC and interested/relevant others met with the outside evaluators. Results of the site visit were shared with the SLAC during February 1997.

At some time in the future, both Dr. Nickman and Dr. Shane-McWhorter would like to conduct a formal evaluation of the collective effect of participating in this program to assess whether participation in these programs affected students in a long-term manner.

Value of Data
The course evaluations, one of which attempts to measure changes in student perspectives and skills pre- and post-SL experience, have been helpful to focus students and faculty on connections between academic material and SL activities. However, perhaps because it is difficult to measure changes in students over a ten-week period, this survey did not provide as much information as had originally been hoped. Although quantitative data such as these might prove more useful in terms of making the results publishable, qualitative data and anecdotes from the program have been most useful in terms of development and maintenance of the program. The Bennion Center SL course evaluations based on the Wingspread Principles of Good Practice have been very useful in assessing whether the Utah courses have accomplished program goals.

Utilization of Data
All interested parties received copies of the evaluation results. Community partners were given relevant evaluation results to monitor their students’ feedback. Evaluation results also were used to guide future program development and evaluations. The SLAC met on a quarterly basis and remained up-to-date on all past, present, and future SL activities within the College of Pharmacy. An advantage of evaluating the project during SLAC meetings was that it was a team approach that worked well for Utah’s situation and work environment. Common problems could be addressed across a number of different constituencies. For example, if students appeared to have difficulty gaining access to clients’ personal homes for one particular agency, another agency may have already figured out how to solve that problem, which allowed the entire group and program to develop and progress more rapidly than if problems had been identified and solved in isolation. Structural variables—such as placement and monitoring of students in sites and working to establish and maintain relevance of academic coursework to site activities—were continually reviewed by the SLAC.
PROJECT SUSTAINABILITY

The future of SL at the University of Utah, particularly in the College of Pharmacy, appears very bright.

Planned Institutionalization of SL

The College of Pharmacy Curriculum Committee has endorsed SL and has recommended that it be extended from the current two required courses to a continuous, five-semester experience, permanently institutionalizing SL for undergraduate pharmacy majors. The curricular integration of SL developed in response to the college’s decision to advance professional education by changing the five-year Bachelor of Science in pharmacy degree to the accreditation-driven six-year doctorate degree, and the dean’s charge to introduce “something innovative” into the new curriculum.

Dr. Nickman’s course will be taught during the first semester of the new curriculum for P1 students as an anchor course and orientation to the SL program. No change in current agency participation is anticipated, although five to seven new agencies will be added to the course. Dr. Shane-McWhorter’s course will serve as an anchor course and completion of the SL program for P3 students. Yet to be developed and implemented are the three one-credit SL courses titled Longitudinal Care that will link the P1 and P3 courses. Faculty from other college departments in the basic and clinical sciences are being recruited to work with students and community partners in reflection sessions as part of the Longitudinal Care experiences. Ideally, a pair of students would begin with a client during Dr. Nickman’s course and stay with that client for the entire three years, or at least for a minimum of two semesters. In addition, because the focus of Dr. Nickman’s service experiences has been with agencies that primarily serve seniors, the new curriculum should allow students to pursue interests in other areas, such as pediatrics and public schools.

A Longitudinal Care Advisory Committee (LCAC), comprised of faculty, students, and community partners, was appointed by Dean Mauger in June 1997 to oversee development, maintenance, implementation, and evaluation of the new five-semester program. The LCAC encompassed the HPSISN project SLAC, with the addition of faculty who were new to the project. Current projects and discussions being undertaken by this group include incremental development of new SL courses and input into the staff and faculty coordinator justification, identification, and hiring process.

An obvious challenge will be in the recruitment of more faculty from other college departments to participate in SL. A not-so-obvious challenge will be to continue to work with faculty to free-up additional time in the curriculum to accommodate SL requirements. Academic hours have been set aside to provide students with credit for the learning associated with service; however, changes in other parts of the curriculum to provide students with time to pursue service obligations have not yet surfaced. Student comments via the SLAC have indicated that without ideological changes with regard to how
the curriculum is structured in general, it is doubtful that students will continue to support the expanding time commitments expected of them with no appreciable decrease in the number of hours that they are currently expected to attend classes.

**Funding**

The University of Utah’s Teaching Committee has funds available for course improvements, although the College of Pharmacy has not yet tapped into this resource.

Separate from the HPSISN grant, Dean Mauger was able to garner a modest sum of money from the Bennion Center’s SL Course Development Program to aid in the institutionalization of SL. This money will enable the College of Pharmacy to support part-time efforts of a faculty-level SL coordinator until other monies are found to support a full-time staff-level coordinator.

**Programs Supportive of SL**

As an institution, the University of Utah has been a national leader in course-based SL integration, especially for large, urban, research institutions, and supports a wide variety of programs supportive of SL, including:

- The SL Teaching Assistants Program;
- The Faculty-Teaching Assistant SL Training Program; and
- The SL Small Grants Program to support faculty access to resources for course development.

In addition, there has been a yearly appointment of a SL faculty mentor (Dr. Nickman has held this position); the Bennion Center’s Faculty Advisory Committee (BCFAC) has had as members both Dr. Nickman and Dr. Shane-McWhorter; and the university was a lead supporter of creating the Utah Campus Compact (Acting President Jerilyn McIntyre was its first president for 1997-1998).

**Other SL Programs within the University of Utah**

The College of Nursing at the University of Utah also received a HPSISN grant. Although the pharmacy and nursing HPSISN projects have not directly interacted in terms of co-teaching students, pharmacy students have certainly benefited from the nursing project. A number of pharmacy students have taken the College of Nursing course Reflections in SL. As of fall 1997, Utah pharmacy students also were eligible to participate in a multidisciplinary ethics course sponsored by the medical and nursing colleges. Pharmacy students continue to be recruited for the University of Utah’s SL Scholar’s Program; the availability of College of Nursing courses as electives for pharmacy students should make enrollment as a SL Scholar more likely.

**LESSONS LEARNED**

**Encourage involvement of all partners.** Although there is an economy of scale when determining the number of people to be involved in curriculum development and evaluation, involvement of as many people as possible from each group (faculty, students, and community agency partners) is desirable. Both before and during HPSISN funding, input and participation
from representatives of each group have proven critical to both program sustainability and expansion.

**Provide support of students’ SL.** In order to prepare health professions students to *be in service with* rather than simply to *provide service to* other people, it is crucial to involve all partners in the development of programs that are able to support not only the academic component of SL, but also the emotional component that is tied to working with other people. It is not enough to continue the traditional medical model of health professions education, whereby students are inadequately supported in humanistic endeavors and experiences. Students, and sometimes faculty and community partners, need to have a safe place and adequate support to allow reflection on their activities and integration of their experiences into their daily lives.

**Utilize local resources.** Receiving support and funding from local resources, such as the university community service center and teaching committee resources, was critical. Extramural sources of funding also look more favorably on proposals when local resources have first been exhausted.

**Respect the community’s perspective and knowledge.** Universities need to remember that they are guests at the community table and, as such, do not have all of the answers to a community’s problems and issues. In some cases, the university can become part of a larger problem for communities, in terms of the distribution of scarce community resources. The university can show their respect of their community partners by inviting their involvement in the classroom. In return, community partners may be more willing to involve university faculty and students in their world, the day-to-day realities of providing health care in the local community.

The university also has expressed gratitude and respect toward the community partners by awarding them adjunct faculty appointments. Many academics take that lightly, but the community agencies have indicated that such an appointment is very appreciated. They accept the appointment as a serious recognition of the value of their time commitment and contributions to the teaching of students.

Overall, the Utah HPSISN project faculty and most of the students believe that the university community has received much more in these relationships than the university could have possibly given, especially in terms of the real-world teachings provided by community partners and their clients. Some personal friendships also have developed, based on similar beliefs and ideals regarding the provision of community-based health and medical care. These community-campus partnerships will be maintained beyond the end of the HPSISN Program. The attitude of gratitude expressed by the university will continue to strengthen them.
APPENDIX

1997 Student Evaluation
Results from the 1997 student evaluation of the P1 course Social Foundation of Pharmacy Practice indicated the students felt they provided a needed service (100%); analyzed issues regarding citizenship, social and personal responsibility (92.7%); developed a greater sense of personal responsibility (95.2%); brought lessons learned in the community back into the classroom (95.2%); and were given help in the course to understand their volunteer experiences (97.6%). The students also agreed that SL enhanced the course material (97.6%); contributed to their ability to identify other service opportunities (85%); made class attendance more interesting (80%); increased their awareness of community problems (97.5%); made them study harder (43.9%); and made them more interested in helping to solve community problems (87.8%). In February 1998, nearly a year after the winter 1997 course ended, three students (out of the original 46) still were spending time with their home-bound seniors.

1996 Student Evaluation
Results from a December 1996 Bennion Center SL student course evaluation indicated that students felt that they provided a needed service (97.6%); analyzed issues regarding citizenship and social and personal responsibility (73.8%); and developed a greater sense of personal responsibility (78.6%). They agreed that service enhanced learning of course material (66.7%); contributed to their ability to identify other service opportunities (90.5%); made class attendance more interesting (54.8%); increased their awareness of community problems (95.3%); made them study harder (33.3%); made them become more interested in helping to solve community problems (78.6%); and brought lessons learned in the community back into the classroom (66.6%). They also agreed that the course helped them to understand their volunteer experiences (66.6%)