**Interdisciplinary Service-Learning: A Model for Community Partnership University of Kentucky**

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**PROJECT OVERVIEW**

The health professions service-learning project at the University of Kentucky Medical Center began in 1995, supported in part by a grant from Health Professions Schools in Service to the Nation (HPSISN). As a unit within a land-grant university, the medical center has a strong commitment to service. The university’s tripartite mission of education, research, and service created a favorable context for the SL project. The university is organized into three sectors: the medical center, the Lexington Community College, and the Lexington campus (agriculture, arts and sciences, business and economics, communication and information sciences, education, engineering, fine arts, human environmental sciences, and law). The medical center and the Lexington campus are within a quarter mile of each other, providing easy access for interdisciplinary experiences. The development of the SL project within an academic health center was significant considering the growing mandate for such centers to be responsive to their local communities (Seifer & Connors, 1997; Rubin, 1998).

The existence of a SL program, initiated in 1989 in the Office of Experiential Education on the Lexington campus, facilitated the growth of the HPSISN project. The director of this office ensured that the HPSISN project received significant infrastructure support, including provision of faculty development workshops, funding for two students to attend a statewide SL meeting, and assistance with publicity.

The project began with the Steering Committee, composed of faculty and staff representing the five colleges of the medical center (nursing, medicine, pharmacy, dentistry, and allied health professions) and the Office of Experiential Education. Members of the committee jointly developed the project under the leadership of the College of Nursing. The Advisory Committee was developed to provide input into project design and purpose. Its members included health professionals representing the five disciplines, community members representing the agencies, and consumers. They met for the first time in the summer preceding admission of the first students into the project.

The project’s original community partners were agencies in which faculty from the College of Nursing had active clinical practices. The committee hoped to link the service project with an academic faculty practice program. The
common focus of the agencies became the original focus of the project: meeting the unmet health needs of underserved women and children in the Lexington, Kentucky, urban-county area. Three iterations of the project were completed during the grant period.

**Project Mission and Vision**

In July 1997, the Steering Committee held a retreat for ongoing program development and planning for institutionalization of the program. The group agreed upon the following mission and vision statements for SL within the medical center. Although the mission and vision statements continue to be refined, these early versions reflect the growth in thinking that characterized the program at this point.

**Mission**

The University of Kentucky Medical Center SL Program will be a model of excellence through building partnerships, serving communities, and educating health professionals to understand and have an enduring commitment to civic responsibility and social justice for the common good.

**Vision**

University of Kentucky Medical Center faculty, staff, and students will partner with the larger university and communities throughout the Commonwealth of Kentucky to share strengths and improve the quality of life through collaborative service and participatory action-research. SL will be an integral part of curriculum design, clinical education, professional development, and lifelong learning throughout the University of Kentucky Medical Center.

**Project Objectives**

- Enhance the medical center’s student and faculty commitment to community service;
- Improve selected aspects of the health of high risk women and children in the community;
- Institutionalize SL within the medical center; and
- Strengthen partnerships between the medical center and community health and human service agencies.

**SL Defined**

**Philosophy**

Interdisciplinary SL is a unique approach that maximizes the values and benefits of partnership. It is an especially appropriate pedagogy for academic health sciences centers, whose missions emphasize teaching students to work effectively in teams and with their communities (Rubin, 1998). A range of health disparities exists between the population as a whole and underserved groups within the United States (Hamburg, 1998). Health professions students require competencies in delivering care to diverse, multicultural groups and collaborating with community members as well as professionals in a wide range of disciplines. Interdisciplinary SL provides an effective vehicle for helping health professions students learn the necessary cultural and collaborative skills to improve the health of the public and reduce disparities in access and health outcomes.

Educators around the country are increasingly embracing SL as an essential component of higher education curricula (Lankford & Games, 1997). SL fosters a stronger link between higher education and local communities by providing a mechanism for partnerships...
between local agencies and community members and students, faculty, and staff.

Goals

- Foster civic responsibility among students, faculty, and staff;
- Increase the level of professionalism of students; and
- Foster partnerships between academia and community members for improving community health (Connors & Seifer, 1997).

Definition

SL was defined in this project as learning that occurs through structured service activities that are planned and implemented in partnership relationships. These partnerships involve students, community members, staff, and faculty. SL differs from volunteerism because it is mutually designed by each of the key stakeholders to maximize the benefits gained by each stakeholder, rather than being designed primarily to benefit a particular community agency, as volunteerism might (Furco, 1996). SL differs from traditional clinical rotations for health professions students for the opposite reason: It is designed to benefit all parties equally; it is not designed primarily to meet student learning objectives. SL differs from experiential education; although students do learn through their SL experiences, they also learn from planned didactic pre-service activities and from critical reflection, neither of which is necessarily part of experiential education. Essentially then, SL capitalizes on all stages of the learning cycle described by Kolb (1984), while building on planning by partners with equal stakes in the process and outcomes. These views of SL undergirded the mission and vision statements adopted for the medical center project.

Steering and Advisory Committees

The Advisory Committee, composed of health professionals from the five disciplines, community members representing the agencies, and consumers, was responsible for providing recommendations regarding program functioning, advising on strategic planning for health professions SL within the medical center, and helping to identify resources for ongoing funding. Committee members were included in evaluations of knowledge and attitudes toward SL, and were surveyed each year of the grant regarding their level of satisfaction with their role in decision making. Results were positive, although faculty continually identified new approaches to ensure that Advisory Committee members did, in fact, have meaningful roles in decision making.

The Steering Committee members were concerned that the structure of the Advisory Committee meeting agendas was not fostering input to the fullest extent possible. Because of the project’s strong emphasis on partnership, Steering Committee members were eager to ensure that the Advisory Committee had a meaningful role to play in providing advice and recommendations related to the project. During the third year of the project, the Advisory Committee meetings were changed to a roundtable and poster session format to facilitate informal discussion and reciprocal dialogue.
PROJECT PERFORMANCE

Curricular Integration of SL
The SL project was integrated into existing courses within each of the five medical center colleges. Senior-level baccalaureate nursing students enrolled in the course Community Health Nursing and Leadership/Management. Third-year physician assistant students enrolled in a clinical course within their program’s community track. Dentistry students enrolled in an independent study course. Pharmacy students enrolled in an elective course. Third-year medical students, during the project’s first year, participated through the obstetrics and pediatrics rotations. By the project’s second year, it had become clear that, due to the students’ heavy clinical commitment, the students’ third year was not the optimal placement for a SL activity. At that point, SL was incorporated into the second-year course, Physicians, Patients, and Society.

Fall Semester
Faculty designed the curriculum for the interdisciplinary teams as a two-semester plan of study and field experience. During the fall semester, students learned the concepts and theories of SL, methods of community assessment with a special emphasis on assets as well as needs, and methods of developing and prioritizing goals and objectives in partnership with community members. The team dynamics portion of the fall curriculum was significantly enhanced with the addition of health communications students in fall 1997. Doctoral students and faculty from the Department of Health Communications brought strength in this area and offered their reflections and insights to the rest of the group. These reflections helped all to focus more explicitly on team development and interprofessional communication.

Preparation for SL Activities
Students learned about cultural mores among underserved populations and strategies for assimilating into neighborhood and free clinics. At the beginning of the three-year project, Advisory Committee members had strongly recommended that students be adequately prepared for field experiences. One community agency member had poignantly talked about the frustration she had when groups came to the clinic wanting to do “good” and inadvertently contributed to a sense of dependency by patients. All participants were committed to avoiding these problems.

Development of SL Activities
Student teams of five to twelve students from multiple disciplines conducted focused assessments of their assigned community agency and the agency’s target population. The teams were usually randomly developed and assigned to community agencies, although as the program evolved, students were increasingly placed in agencies based on their requests. They worked closely with agency staff and clientele in articulating both assets and needs, and in negotiating those areas toward which they would focus their SL activities during the spring semester. Members of the Advisory Committee met with the interdisciplinary student teams at the end of each fall semester to discuss the range of assets and needs that
had been identified and the areas of emphasis for service work in the spring semester.

One of the major lessons that emerged from these activities was the difference in perspectives on assets and needs held by varying constituents, including clients, community agency staff, students, and faculty. All parties invested large amounts of time each year developing shared language and goals. The lack of agency interest in well-circumscribed projects that could be completed within a semester occasionally frustrated students. Community partners expressed an increasing interest over the three years in activities that they could continue after the students completed their work. Students were willing to learn from this, however, as is clear from this comment: “We can’t go in with a project that might be time-limited and make us feel good. We need to meet the needs of the community.”

Spring Semester
Curricular content in the spring semester focused on project management, implementation, and evaluation strategies. Students learned how to develop a budget for a service project, negotiate for the resource allocations they requested, and develop implementation and evaluation plans. Student teams could negotiate for any or all of a $500 fund that had been set aside for supporting student SL projects. In one situation, a team member realized it would not be possible to fully support the project his team had designed with the funds available, so he wrote a successful grant proposal for additional funding from a student professional organization.

Implementation of SL Activities
One of the most important areas of learning occurred during implementation of the service projects. Changes had to be made, activities did not take place as planned, and barriers were encountered. Students had to learn to understand not only the priorities of community agencies, but also those of their peers. They experienced the frustration that sometimes develops during times of continual change. However, most importantly, they took advantage of the opportunities to learn through their reflections. One student expressed what had been learned about partnership and flexibility by saying, “We like to think we are in charge, but it’s not that way. We really need to listen to agencies and put aside some of our own self-gratification.”

Student Recruitment and Participation
Twenty nursing, medicine, pharmacy, dentistry, and physician assistant students participated in the project during the first year. These students volunteered to participate following active recruitment within each of the five colleges. Each college managed internal student recruitment and selection. For example, in the Colleges of Nursing and Allied Health Professions, flyers were distributed to students that described the project and participants were selected based on their goals, past experiences, and motivation. In the Colleges of Medicine, Pharmacy, and Dentistry, faculty recruited students they knew were likely to be interested in the project. The students worked together on interdisciplinary teams, which included a student from each discipline.

During the second and third years of the program, intradisciplinary teams of
students began engaging in SL activities in addition to the interdisciplinary teams. The Colleges of Nursing and Pharmacy developed intradisciplinary teams in other courses beyond those in which the interdisciplinary teams were enrolled.

**SL Activities**

Student teams implemented a diverse range of health education and screening projects in the agencies. All student projects resulted from a comprehensive assessment of needs and assets that was completed with the input and recommendations of community partners. Once student teams identified a list of potential needs toward which they might devote their efforts, they worked with community partners to determine the need toward which they should, indeed, focus. They also worked with community partners to determine the best strategy from among a list of alternatives that would be most feasible, acceptable, and culturally appropriate. Thus, community partners were involved in every step of the process. It is significant that health promotion and primary prevention were determined to be the major areas of need. With the health system refocusing toward these areas, the students were learning valuable skills with their SL activities.

During year one, 101 men, women, and children, including community agency personnel, were served. During year three, 262 men, women, and children, plus agency personnel, were served. The SL activities included:

- A medication counseling session at a neighborhood clinic;
- A health education session at a homeless center on basic health maintenance for homeless or marginally housed individuals;
- Dental Health Days at family support programs;
- Health fairs at a center for the elderly and a college student center;
- In-service education sessions regarding communicable diseases at the Salvation Army;
- The acquisition of safe play equipment for a children’s shelter;
- Participation on the strategic planning team at a neighborhood free clinic;
- A faculty SL project at a family support program, involving the development of a resource handbook for clients on recognizing, preventing, and managing common childhood illness;
- Development of drug protocols and an inventory system for a neighborhood clinic; and
- Development, with residents, of a baby-sitting cooperative at the single-parent self-sufficiency program.

**PROJECT ACHIEVEMENTS**

The primary influence that the SL project has had on meeting unmet needs in the community has been in the areas of health promotion and primary prevention. The SL activities have been successful for students, agencies, and clients.

The project has had a significant influence on curricula throughout the medical center. SL was incorporated as a major element of the undergraduate curriculum in the College of Nursing.
The College of Allied Health Professions developed a community track for physician assistant students that includes the SL component. Pharmacy and medical students also have substantial service components in their new curricula. Dental students opt for structured community service as part of their programs. Principles of SL are incorporated into the externships in which dental students participate.

Program Evolution
Two major changes occurred during the three years of the project. First, students and faculty found that focusing only on women and children was too narrow and created artificial barriers to providing services. For one thing, it is not desirable to separate men and women for receipt of services such as health promotion programs in agencies that serve families. In another case, one agency that was developing a mobile outreach van that would focus on women and children experienced some delays in completing the certificate-of-need process. Thus, the group broadened its focus to underserved families, while maintaining a heavy emphasis on working with agencies that normally serve a high proportion of women and children.

Second, the project expanded. By the second year, student interest and demands expanded the project by 50%. The program added health communications and clinical nutrition students during year three. This occurred as a result of requests by faculty in those disciplines who had heard about the program. Faculty capped the interdisciplinary team component of the program at 36 students in order to maintain the desired level of quality.

Significant Milestones
One significant program milestone was a presentation about project development and design made by an interdisciplinary team at the 1996 HPSISN meeting in Boston. The University of Kentucky team included a nursing student, a pharmacy student, five faculty from different disciplines, and one community partner. Planning for this event and the dynamics during the meeting itself helped solidify the group’s belief in the value of interprofessional activities. Another significant program milestone occurred in year three when the Steering Committee realized that the structural modifications made in that year were not as effective as planned. The modifications included increasing student team size from five or six to twelve students; assigning each team to two complementary agencies, rather than one; and giving each team two to three faculty mentors. As the year progressed, all involved agreed that this structure was too diffuse and did not foster the strong team dynamics that had been experienced earlier. This learning represented a milestone because of the reflection and introspection the challenges created and the chance it provided to the Steering Committee to clarify what seemed to work well and what was not as effective.

Finally, the beginning and ending of the HPSISN grant were significant milestones because in both cases, the group was compelled to move forward with planning and development. The year following conclusion of the grant, the Steering Committee completed what has now become an annual retreat and solidified plans for a formal SL curriculum that will initially include two formal courses. Both were offered in 1998-1999 and reflected the lessons that
were learned from the three years of the HPSISN grant around issues that included best practices for preparing students for SL field work, SL theory, team building, critical reflection, and community assessment. More recently, the group has engaged in an intense period of strategic planning for health professions SL. Several key goals have been targeted for accomplishment in the next three years. These include a strong emphasis on faculty development in SL and support of research related to SL, such as community-based participant action research.

COMMUNITY PARTNERSHIPS

The three original community agency partners were selected because College of Nursing faculty already had active clinical practices in them. Over time, additional agencies were suggested either by Advisory Committee members or by faculty on the Steering Committee. A key strategy for developing and fostering community partnerships has been working with the Advisory Committee, which includes community agency staff and consumers as well as university health professionals.

A broad cross-section of health and human service agencies that serve families have partnered with the medical center for this project. The community agencies or focus include:

- Comprehensive services for the homeless;
- A neighborhood free health clinic;
- Family services;
- Early childhood education for underserved children and families;
- A self-sufficiency program for single-parent families;
- Educational, recreational, and support services for elders;
- Temporary care for children suspected of having been abused or neglected; and
- An elementary school in a low-income neighborhood.
PROJECT EVALUATION

Evaluation Methods
The project was evaluated using three primary strategies:

- Pre- and post-test evaluations of the knowledge and attitudes of students, faculty, and Advisory Committee members;
- Focus groups with students; and
- Student evaluations of the outputs and selected outcomes of their projects.

Students also provided input during class discussions and reflection sessions. Faculty seriously considered their input and made major program adjustments as a result. Faculty reflected that perhaps the group had been so responsive to student input that academic preparation for SL had not been as rigorous as desired. Consequently, one of the new courses faculty designed addressed the issue of adequate preparation for SL.

Evaluation Findings
One of the most significant findings in the evaluation was the lack of evidence of changes in attitudes and knowledge related to SL and to the population of underserved women and children. In all three years of the project, student knowledge was high at the baseline. Only in year three did students report an increase in levels of altruistic behavior and beliefs about the importance of community-based primary care education. Interestingly, students reported important changes in attitudes and knowledge in the focus groups and reflection sessions held throughout the project. Faculty concluded that two factors accounted for the lack of change in pre- and post-test scores. First, those students who participated were volunteers who already held altruistic, service-oriented attitudes and valued social justice and civic responsibility. Second, the instruments used to measure change were not sensitive enough to pick up the types of qualitative changes that were occurring. Students reported, for example, that simply driving into some of the neighborhoods in which community agencies were located was a learning experience for them. They also reported that they valued the SL experiences they had, despite some of the experiences being uncomfortable for them.

SUSTAINABILITY

Three strategies were employed to ensure program sustainability:

- Inclusion of SL in the medical center budget, which indicates that the project is moving toward institutionalization within the medical center.
- Development of course proposals for two medical center courses that incorporated the most effective strategies from the first three years of the project.

The first, a didactic course, is a prerequisite of the second, a fieldwork course:

- The didactic course, a three credit-hour, one-semester class offered in the fall, focuses on cognitive and affective preparation for SL.
- The fieldwork course, a clinical practicum offered in the spring, focuses on working with community

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partners in negotiating, developing, implementing, and evaluating service projects.

- Incorporation of SL within the overall strategic focus of the university. This is particularly appropriate given the land-grant nature of the university and the fit between the university’s mission and the emphasis of SL. The faculty continues to disseminate information about SL and strategies for incorporating it, using a broad range of methods to advance its institutionalization. One initiative that facilitated this momentum was the regional Community-Campus Partnerships for Health meeting, co-hosted by the University of Kentucky Medical Center and West Virginia Wesleyan College in December 1998. An additional initiative that helped the Steering Committee to continue to move forward was a mentoring relationship the University of Kentucky established in 1998-1999 with the University of Washington in Seattle related to interprofessional SL.

LESSONS LEARNED

Importance of Teamwork. The first three years of the medical center’s SL project emphasized the importance of teamwork above all. The interdisciplinary Steering Committee, student teams, and the Advisory Committee all focused on developing cohesive team relationships. Because this project was so heavily interdisciplinary in nature and each discipline had its own unique values, intellectual paradigms, and preferred problem-solving strategies, each team became quite aware of the importance of inclusive decision-making processes. This was consistent with the project’s emphasis on partnership, so privileging decision-making processes as much as decision-making outcomes fit well with the overall program philosophy.

With the current health care environment being so fast-paced and, in fact, hyperturbulent in some respects, conscious attention to team building, active elicitation of different perspectives and voices, and adequate time for reflection are paradoxical. However, all involved in the project believed those were essential elements to building lasting program success and helping future health care professionals develop critical skills needed for the health care environment of the twenty-first century.

Evolution of Project Design. Additional learning centered on project design and implementation issues. For example, the group learned that teamwork was less effective with groups larger than about seven people, and that focused effort in one community agency seemed to work best. As interdisciplinary teams became larger and developed a diffuse focus, they seemed to lose their effectiveness. Further, the model employed by this project was labor-intensive in terms of time commitments by faculty and community agency representatives. A new model is being developed for the fieldwork practicum course that will provide students with more flexibility and autonomy, while retaining faculty guidance and substantive curricular emphasis on new learning.

Communication. Regular communication by a variety of means facilitated student, faculty, and community agency work and could, in fact, be expanded in future courses.
Electronic mail, heavily used within the project, proved very helpful in maintaining a smooth flow of information. The staff member assigned to the project was essential for facilitating communication among all participants. Careful curricular planning and adequate time for face-to-face discussions of values and issues also was essential for project effectiveness.

**Incorporate Community Members in Process.** Health professional educators should incorporate community members and students in the development, implementation, and evaluation of new models of interprofessional care delivery. Participants in the University of Kentucky project found that the perspectives that developed from interdependent work were more likely to result in new ways of understanding community assets and needs, and to stimulate novel approaches to service delivery. Given the focus of higher education today on distributed knowledge development, utilization, and sharing, SL provides an ideal philosophy and pedagogy for accomplishing those goals.

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References


