PROJECT OVERVIEW

In order to help balance the university-based clinical training that our students receive, the University of Southern California’s Department of Dental Medicine and Public Health coordinated a number of community service projects for the underserved and disadvantaged in Los Angeles. We understood that our students’ training and experience needed to be augmented to include responses to and reflection upon the multifaceted problems of the university’s surrounding, multiethnic communities. Through support from Health Professions Schools in Service to the Nation (HPSISN), the USC School of Dentistry integrated service-learning into community dentistry experiences to provide education and preventive care to inner city children and families. HPSISN helped us to become more directed in our goals to expand our community service activities and make them more relevant to both community and student needs. However, our original objectives proved to be too academically ambitious and logistically difficult and were reviewed, revised, and refined.

Project Goals
- Strengthen partnerships between health professions schools and communities to address unmet health needs;
- Instill an ethic of community service and social responsibility in health professional schools, students, and faculty; and
- Equip the next generation of health care providers with the community-oriented competencies necessary to practice in a changing health care environment.

Curricular Objectives
- Interdisciplinary Training Objective: Develop interdisciplinary teams, including dentistry, dental hygiene, medical, nursing, social work, and education students.
- SL Integration Objective: Integrate SL into the new first-year dental students (DDS) course Introduction to Community Dentistry (130 students) and the existing senior DDS mobile clinic rotation (120 students).

SL Defined

Goals
SL is a method and philosophy of experiential learning through which students meet community needs while developing:
- Critical thinking and group problem-solving abilities;
- Commitments and values; and
- Necessary skills for effective practice and citizenship.

SL experiences:
- Develop in collaboration with the community;
- Enhance the standard curriculum by extending learning beyond the lecture hall.
- Allow students to apply what they
have learned to real world situations;
• Provide time for reflection, leadership development, and discussion;
• Foster a sense of caring for others; and
• Focus on the needs and strengths of the community.

SL is a structured experience that combines community service with preparation and reflection. Students participating in SL activities are not only expected to provide direct community service, but also to learn about the context in which the service is provided and to understand the connection between the service and their academic coursework.

**SL versus Clinical Training Experiences**

SL activities include reflection, community-identified needs and strengths, community-campus partnerships, interdisciplinary collaboration, institutional change, and student leadership.

**Faculty and Student Development**

Faculty development has included annual in-service orientations for up to 20 Department of Dental Medicine and Public Health faculty. SL, reflection, and community rotations were discussed. A survey was completed by participants from departmental sections representing the AIDS clinic, geriatric and special patient programs, behavioral dentistry, community dentistry, mobile clinic and the Problem-Based Learning Project. Faculty involved in the HPSISN Program received training at the HPSISN conferences, the Corporation for National Service’s Learn and Serve workshops, and the Stanford Haas Institute. The conferences have been particularly valuable in allowing for individuals to exchange stories, suggestions, and strategies.

The student workshop at the HPSISN conference in San Francisco oriented our dental student participant to HPSISN and SL and exposed him to students from other disciplines and parts of the country who were involved in a variety of community service projects.

**Advisory Committee**

The Advisory Committee has included members of the community agencies and schools where services were being provided by USC dental students, staff from other USC programs (JEP and IPI), dental and dental hygiene students and departmental faculty (including the chairperson, SL course faculty, and HPSISN coordinators). Membership has been fluid, with student and agency representatives changing. Meetings have been held annually, though the committee meets more frequently when necessary, such as during initial project planning and project evaluation and revision phases. Operating procedures and structures have been informal. Representatives attending the most recent meeting included, from the community, Mary Donally-Crocker, director, Young and Healthy; Pam Wagner, Healthy Start nurse, Murchison School; Howard Lappin, principal, Foshay School; Blanca Granados, dental coordinator, LA Free Clinic; Carol Reynolds, director, Glendale Healthy Kids; Christina Kan, coordinator, Pacific Alliance Healthcare Foundation; and, from USC, Dick Cone, director, Joint Educational Project; Stephanie Taylor-Dinwiddie, director, InterProfessional Initiative; Allen Chien, dental student, Doctors Ought to Care (DOC); and Eleanor Nielson, dental hygiene student.
Key Personnel
The personalities involved in the community and at the USC dental school have been the strongest facilitating factors to the success of the program. Dr. Goldstein has been involved with the community for decades, and individuals such as Dr. Done, who founded Ayuda International, a philanthropic organization providing health care in California and Latin American countries through volunteers, will be good SL mentors to the PBL students. The DH instructors—Tom Niederer followed by Katra Abassi—have been supportive of student involvement in the community and keeping the SL components in the class. The DOC student leaders through the project years have continued and, in fact, expanded the role of the DOC students in community education. The JEP director at USC has been a continued source of support, assisting on the Advisory Committee, providing materials, and arranging for community rotations.

PROJECT PERFORMANCE

Curricular Integration of SL
The SL integration objective was revised in response to both barriers and opportunities presented on campus and within the community. Our proposal included integrating SL into a new first-year course and an existing senior course. However, we were given the opportunity to integrate SL into another course, as well when Niel Nathanson, the HPSISN site coordinator/co-director at USC, was recruited to teach in fall 1995 the senior dental hygiene (DH) student course Community Dental Health (50 students). We took the opportunity to enhance the course with SL presentations, related reading materials, expanded community experiences, and student feedback through a written questionnaire and survey. The subsequent instructors have continued to include these additions to the course.

SL also was integrated into a new community health elective rotation for junior and senior DDS students in the Problem-Based Learning Project (PBL) and a pilot DDS training track, developed by the dental school but located at the health sciences campus, that had not begun when the HPSISN proposal was submitted.

PBL presented, perhaps, the best opportunity for SL because of its small group size (12 students per year), regular discussion meetings, exploratory learning approach, and community-based clinical settings. Sites are being developed at a community clinic, homeless shelter, school, and senior center; the dental school clinic is not a primary PBL site. The PBL faculty directors have been exploring SL and integrating these concepts into their curriculum with the input of the HPSISN project co-directors, Charles Goldstein and Niel Nathanson. PBL’s Mona Iskander participated in the April 1997 conference with other national HPSISN grantees.

SL Reflection Requirements
The logistics of adding formal SL components (e.g., seminars, presentations, and readings) proved to be difficult for the mobile clinic, given that the weeklong rotation has no class meetings, only a busy off-campus senior DDS clinical activity at elementary schools. But there is a core group of
almost twenty students (the Mobile Clinic “staff”) who volunteer to coordinate the clinics, especially the non-required Saturday activities that precede the week-long required rotation. Discussions with students and faculty led us to the decision that working with the student staff—who meet periodically throughout the year and attend all the clinics in different communities—would be a more satisfactory way to fulfill the HPSISN SL reflection requirements for extracurricular community service projects than holding a “core class.” (This replaced the geriatric/special patient extracurricular project originally proposed.)

**SL Materials**

SL presentations and materials have been developed, using HPSISN provided publications, community service journals, dentistry related articles, USC resources (e.g., JEP, IPI and the Office of Civic and Community Relations) and other sources (even comic strips!). The missions of the university, dental school, and dental/dental hygiene associations are highlighted, especially as they relate to community service, philanthropy, professional responsibility, and ethics. The concepts of SL and reflection are defined and put into perspective with an abstract of an article titled “Ethics and Volunteerism,” by Dr. Goldstein (1994). Numerous newspaper articles are presented that refer to charitable services provided by dental professionals to disadvantaged communities. Two videos are viewed and discussed—an IPI-produced video on interprofessional collaboration and a Ayuda International-produced video on volunteerism. These materials, with slight modifications, are presented and distributed to the dental hygiene and dental students in the Introduction to Community Dentistry (DDS Freshman), Community Dental Health (DH Seniors) and Problem-Based Learning (DDS Sophomore) classes, as well as to the DOC and mobile clinic student volunteers.

**SL Activities**

During the 1997 calendar year, 129 first-year DDS students, 12 junior PBL DDS students, 20 senior DDS students, and 49 senior DH students developed, organized, and provided individual and group education, screening, referrals, toothbrushing instruction, and preventive and primary dental care to needy families to reduce delayed diagnosis and improve follow up care, at twelve community events and health fairs, seven elementary schools, and seven mobile clinics. More than 2,300 people, primarily children and their family members, were served. Community service in these activities involved over 200 students and 24 faculty for a total of over 920 volunteer hours.

The Community Dental Health students began training the Doctors Ought to Care (DOC) first-year DDS student volunteers, with whom we were working on our other extracurricular SL project. The DOC student directors (one senior and one junior DDS student) met with the HPSISN coordinator, DH faculty, and USC JEP coordinator to develop expanded elementary school health presentations. They also started a pilot project to train and coordinate teams of DDS freshmen going into the community. The project eventually developed in conjunction with the Introduction to Community Dentistry class—after gaining experience in the fall with the DH students, the new DOC students led teams of the class’s DDS students.
The new elective rotation for junior and senior DDS students involves them in oral health screening and education at community sites (e.g. schools and health fairs). Whereas in the past we simply recruited volunteers for such projects, these students are given an orientation to community health concerns, cultural issues, and screening and educational techniques; also, the students participate in reflection sessions afterward.

Based upon student and community input, we feel that hands-on preventive-oriented education conducted by the students over several sessions with the same children in the community made a better SL experience than the observational/site visit experiences that were part of the class initially.

Interdisciplinary Training
Objective
Oral health practitioners—dentists and dental hygienists—traditionally do not work closely with other health care providers. To increase the students’ ability to understand community issues, maximize multidisciplinary resources, and conduct educational programs, we intended to have our students work in interprofessional teams of medical, nursing, social work, and education students. Reinforcing that goal was the relative isolation of our students from the medical and nursing schools: The dental school is not on the medical campus, and our students do not train with their medical and nursing school counterparts. However, the logistics of scheduling community projects and classroom sessions with other schools proved to be very impractical. (In fact, just trying to schedule joint projects between dental and dental hygiene students during the school week was nearly impossible.) Until these issues are resolved, the interdisciplinary component is limited to a presentation and videos in the classroom by the director of the USC InterProfessional Initiative (IPI) and visits to community agencies with multidisciplinary services.

PROJECT ACHIEVEMENTS

Perhaps our biggest accomplishment has been the transformation of the first-year Introduction to Community Dentistry course from an academically oriented seminar with several observational visits to community agencies to a participatory format. Now the classroom presentations are conducted by representatives of community organizations and faculty working at these sites, followed by active involvement by our students in educational projects with elementary school children in the inner city. We have tapped the unused potential of these 130 incoming students, exposing them to community needs and cultural differences while, we hope, instilling in them a feeling of personal involvement and professional responsibility for caring for the underserved. Dr. Goldstein and Mr. Nathanson published an article promoting SL for other schools in the *Journal of the American Student Dental Association*.

Both the dental and hygiene students now have community dentistry courses with SL components, community rotations, and written feedback, and the PBL students are adding a similar element. However, we have not—and probably will not—achieve the level of reflection components that some other USC programs achieve, notably JEP and
IPI. Taken into consideration must be the intensive training load and different expectations dental students have upon entrance, as well as the number of students involved in community programs—almost 375 dental and 50 dental hygiene students. We feel that, even though it may not fit the SL standard, the project is a success.

COMMUNITY PARTNERSHIPS

Partnership Development

Relationships with HPSISN community partners were established in different manners. New relationships were formed and some that existed prior to the project were strengthened, while several that already existed were eliminated as participants in this particular component of the dental school activities. For example, for the restructuring of the first-year Introduction to Community Dentistry course, the site visits to the School Fluoridation Project, American Cancer Society, and the WIC (Women/Infant/Child) Nutrition Center were eliminated as being passive, observational student experiences; whereas several elementary school sites were added to provide interactive educational student experiences. Many of these local elementary school connections have been facilitated through Dick Cone of JEP, a long established, university-community link providing experiential learning opportunities for students.

Proximity to the central Los Angeles area was a factor for an agency or school’s participation in the project, as this facilitated student involvement. Site support, teacher involvement, and parent participation also were important factors, as were having an interested and involved contact person to act as site coordinator, providing information to the community and orientation/assistance on site. In at least two instances, these coordinators helped develop and conduct surveys to assess satisfaction of the SL project activities. Site coordinators made presentations to our students during classroom sessions.

In virtually every instance of successful partnerships, the community partner had contacted USC, requesting assistance in addressing unmet needs in their communities. In turn, we in the HPSISN project attempted to develop realistic and appropriate responses to these requests, involving community and student input.

Memoranda of Agreement

At the project onset, we initiated formal memoranda of agreement between the dental school and a number of community agencies. Ironically, some of the agencies with which we had signed letters of cooperation have yet to work with us on projects, while other agencies have attended meetings and coordinated activities even though written agreements have never been formalized.

Partnership Sustainability

University-community relationships have been greatly expanded through these activities, giving USC added visibility and credibility in the neighborhoods around the university and with other organizations within the central Los Angeles area. Faculty have been asked to serve on advisory committees (e.g., for Healthy Start sites and several schools) and to assist in workshops (e.g., the Children’s Oral
Health Seminar and the Pacific Asian Health Conference). It is anticipated that these partnerships will continue to exist and evolve as long as there are community needs and university resources.

Community Agencies

We have developed community-campus partnerships with the following individuals and agencies: Howard Lappin, principal, Foshay School; Julio Rodriguez, Healthy Start coordinator, San Pedro School; Rita Flynn, principal, Norwood School; Pam Wagner, Healthy Start nurse, Murchison School; Ruth Heath, nurse coordinator, LA Migrant Education; Blanca Granados, dental coordinator, LA Free Clinic; Mary Donally-Crocker, director, Young and Healthy; Carol Reynolds, director, Glendale Healthy Kids; Christina Kam, coordinator, Pacific Alliance Healthcare Foundation; David Buchbinder, caseworker for the homeless, Dome Village; Nongyao Varamond, coordinator, Thai Health Education Project; Luis Mata, director, Multicultural Area Health Education Center; Carol Parker, president, Dental Coalition for Needy Children; Kelly Stone, director, Camp Hope; and Harris Done, president, Ayuda International.

PROJECT EVALUATION

We have developed methods to evaluate our community health-related classes and SL experiences, maintain more accurate community service data, and assess student and faculty attitudes and actions regarding responsibility for community health care. Extensive research is not our intent; however, we truly want to elicit feedback in order to improve our classes and community rotations. For example, we do not want our students to become less concerned and committed to community health issues after four years of training, as have the majority of medical students (according to surveys). We hope that our incremental approach to instilling responsibility over their four years of training will have a positive impact; we hope to follow these students beyond graduation and into professional practice to ascertain levels of volunteerism and charity. Through feedback, we are trying to measure thoughts and feelings; through follow-up, we intend to measure future practice and philanthropy.

Evaluation Methods

Clients. To date, a limited amount has been accomplished regarding client and community evaluation. For example, at the Glendale Healthy Kids Program, Director Carol Reynolds developed English and Spanish questionnaires to obtain client feedback on the services. This may be a model for other similar activities.

Teachers. Teachers at the schools where the students conduct their educational sessions are asked to give feedback to the students regarding their presentations and interactions with the children; this questionnaire was designed by one of the teachers.

Activity Data. Useful data tracking services, participants, and volunteer hours have been collected using our community and classroom event sign-in sheets. Not only necessary for Corporation for Public Service reports, these have helped us to keep better records regarding our activities, student/faculty volunteers, services
rendered, and communities benefiting. The dean’s office and the USC Office of Civic and Community Relations have appreciated this information.

**Students.** Written feedback obtained from the DDS and DH students regarding the value of community experiences has helped us to revise our classes and rotations. A number of sites were dropped based on student input, and other activities measurably improved.

We also have asked the students to complete a short written response regarding indigent families’ access-to-care barriers and possible professional responses to assist the underserved. Most students note the families’ lack of education, money, and language facility as factors that most restrict their receiving care, along with their giving relatively low priority to dental disease prevention. Many students indicated a willingness to volunteer, time and finances permitting, in the future. (Time and finances are clearly high on the list of their personal priorities!)

The second part of our student survey consisted of a somewhat detailed questionnaire (adapted from Sonia Crandall, Vickie Loemker, Alvah Cass, and Robert Volk’s 1993 medical school survey), regarding attitudes on community service for the needy. We have been working with our in-kind evaluator, Gary Wood, regarding tabulation and analysis of this information. However, one of our hypotheses—that high level of school debt negatively affects the willingness to volunteer—seems not to be significant.

We hope that this means our USC graduates will not be less likely than public school dental graduates to be philanthropic in the future.

**Faculty.** Faculty are asked to complete the same survey the students receive, regarding attitudes on community service for the needy.

**Reflection.** As a concept and practice, reflection continues to challenge many faculty and students; we prefer to use terms such as feedback, follow-up, discussion, input, thoughts, and feelings. Informal discussion is difficult to document, but written input is solicited about the experiences through the use of our surveys.

**Value of Data**

The faculty, dental, and dental hygiene student surveys have not provided a lot of meaningful and useful data yet, as we are still in a “baseline” phase. As previously stated, they may provide interesting information if we continue to gather and monitor data over time. We even have discussed the possibility of trying to administer this questionnaire at UCLA and Loma Linda, two other local dental schools with very different structures: one public and one private/religious. However, these questionnaires are quite detailed and the responses need to be entered into a computer program for analysis; hence, they are time-consuming and labor-intensive. To date, we have obtained more immediately useful information through less formal student and community surveys and personal conversations.
PROJECT SUSTAINABILITY

Because the university and dental school are committed to community service, there will continue to be programs such as ours. We are, in fact, embarking on a partnership with the Union Rescue Mission to develop a student-staffed dental clinic for the homeless on skid row. There are, however, challenges to sustainability, including:

- **Scheduling difficulties.** Our major barrier has been scheduling difficulties—not only between the originally proposed multidisciplinary programs, but also between different years of DDS and DH students. We continue to try to work on better-coordinated schedules.

- **Faculty uncommitted to SL.** Some faculty members do not truly grasp and embrace the SL concept. Many still equate it with pure community service, and they do not understand the importance of the reflection component.

- **Failure to recognize importance of addressing community issues.** Unfortunately, the dental profession as a whole does not recognize community causes, and the dental school does not give highest priority to faculty who are primarily involved in this type of work. Over time, however, more faculty are slowly accepting the importance of the program, especially as the community activities gain good visibility for the dental school.

We believe that, beyond the HPSISN funding period, some form of the HPSISN project will undoubtedly exist at the dental school. The dean has boasted of our being the only dental school applicant to have been accepted into the program, and has supplemented the dwindling HPSISN budget. On the other hand, when requests for certain SL requirements are made, he has not always pushed as hard as he might compared to clinical requirements. Financial constraints may affect future support, if outside funds are not obtained. Expansion of SL may be more successful at other universities where dental schools are already better integrated into health professions education; remember that we are isolated from the health sciences campus, a factor always hindering our interprofessional programs.

The initial value of participation in the HPSISN project was to validate the belief by certain faculty that community service is an integral part of professional ethics. USC’s nomination as the College of the Year 2000 by *Time/Princeton Review*—largely due to our social-outreach programs—helps reinforce the value of SL to faculty and students.
LESSONS LEARNED

Be realistically idealistic. Our advice to another institution seeking to initiate SL would be to think ideally but plan realistically, taking into consideration conflicting academic, clinical, and service objectives. It is important to remember that there are many variations to the SL concept, and it must be adapted to community needs, level of university commitment, and type of profession involved. Also, in regard to multidisciplinary activities, the important factor is scheduling—if this cannot be made to coincide, mutual projects will not succeed.

Create an equal partnership. It also is important to regard the community agencies as true partners. As our community partners became more active, a resource network was developed and the project was enhanced. This upcoming year, five community partner representatives from Ayuda, the LA Free Clinic, the PTA Clinic, the Pediatric and Family Health Center, and Young and Healthy will present to our first-year class, giving the agencies more importance and visibility to students entering the dental school.

Be flexible. Also very important to new programs is the ability to be flexible and see new opportunities, especially as some of the originally planned activities may not work out. Seek cooperation and champions wherever they may be—within or without the confines of departments or schools—and especially from others on campus who have experience in community service.

Remember that one of your most important goals is to enhance your students’ education through SL. As inspiration, here are some of our students’ comments regarding SL:

- “Absolutely this was certainly the highlight of the semester. It also has influenced my goals as a dentist—I plan on working/volunteering in similar areas.”
- “It was always rewarding to see the little faces light up when we walk into the classroom.”
- “I plan to try to set up a similar program at my church.”
- One student had the inspiration to “get more volunteers in our profession. If everyone in the dental field donated even one Saturday a year—don’t you think that would make a big difference?

Reference