

**Interdisciplinary Student-Community-Patient
Education Service
George Washington University and George Mason University**

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PROJECT OVERVIEW

The **Interdisciplinary Student-Community-Patient Education Service Project (ISCOPEs)**, a collaborative project of the College of Nursing and Health Science at George Mason University (GMU) and the School of Medicine and Health Science and the School of Public Health and Health Service at George Washington University (GWU), was initiated in April 1995. It was supported in part through a grant from Health Professions Schools in Service to the Nation (HPSISN).

Project Goals

- Improve the health of diverse populations, particularly the underserved, in the Washington, D.C., metropolitan area; and
- Provide SL opportunities for students and introduce students to the principles of community-oriented primary care.

Project Objectives

- Develop interdisciplinary SL projects;
- Develop an integrated community-oriented primary care (COPC) curriculum; and
- Develop a body of institution- and community-based faculty to support SL projects and to teach COPC principles.

SL Defined

The concept of SL functions as the glue of the project. SL activities provide a combination of much-needed services to the community (in the case of ISCOPEs, health education and promotion and disease prevention) and opportunities for students to learn the principles of COPC, continuous quality improvement (CQI), cultural competence, and project planning. These principles are the

foundation of competent, community-focused health care. SL capitalizes on the students' desire to participate in community service activities and their future need to be compassionate, capable, culturally competent health care providers.

Academic and Community Faculty Development

Interdisciplinary faculty from all academic programs and both universities were recruited to serve as academic faculty preceptors. Health providers and staff from the community sites served as community faculty preceptors. Preceptors were tasked with learning about and guiding students through the COPC framework and utilizing CQI tools and techniques to facilitate group dynamics. Several faculty development workshops were conducted and designed to enhance skills of the faculty involved. Given the diversity of the academic and community faculty, these workshops served as a good networking and problem-solving mechanism for all, in addition to building skills and knowledge. The faculty was given the opportunity to share experiences and the

successes and challenges of working with interdisciplinary teams.

Steering Committee

Responsibilities

Since its inception, ISCOPEs has been guided by the Steering Committee, which has been tasked with ensuring that the goals and objectives of the project are accomplished while meeting the various needs of the students, faculty, and community partners. The committee makes policy decisions and takes responsibility for planning and implementation. They meet monthly to discuss project progress.

Members

The Steering Committee, led by project director Bernard Horak, is composed of academic faculty and students from all of the academic programs involved (medicine, nurse practitioner, physician assistant, and health service management

and policy). The student members are self-selected. Although it was a goal of the project to include our community partners on the Steering Committee, due to scheduling conflicts, the community has not been able to play a consistently active role. However, community input has been elicited through detailed interviews with our partners as part of the project evaluation and during faculty development workshops.

Subcommittees

There are several subcommittees aligned with the major components of the project, including curriculum development, faculty development, long-range planning, student representatives, and SL coordinators. An ad-hoc subcommittee was formed for evaluation. They designed the evaluation instruments, administered the tools, and analyzed the data.

PROJECT PERFORMANCE

Curricular Integration of SL

Prior to ISCOPEs, the nurse practitioner (NP) and physician assistant (PA) programs had a community service requirement. Students from these programs had coursework organized around community service activities for which they received credit. The medical school did not have such a requirement. The new and evolving Practice of Medicine (POM) curriculum provided a potential opportunity to introduce the concept of SL and the principles of COPC, CQI, cultural competence, and project planning. The problem-based learning (PBL) component of POM has community medicine as one of its contextual objectives. The Education Council (EC) of the School of Medicine and Health Science approved ISCOPEs

as a vehicle to deliver a portion of this curriculum. A subcommittee of the Steering Committee was formed to develop curriculum to encompass concepts of COPC, CQI, cultural competence, and project planning and development.

Access to Curriculum

At the onset of the third year, the Curriculum Development Subcommittee introduced the students and faculty to a Web-based curriculum. All curricular materials were placed on a Web page, through which students and faculty were able to engage in online discussions relevant to specific curricular topics. For those students and faculty unable to access the Internet, copies of the curriculum were made available.

Requirements for Students

• Commitment to ISCOPEs.

Initially, students participating in ISCOPEs were expected to commit to the project for a period of two years (four semesters). This would enable the students to lead their project through the entire project cycle and provide project continuity at the community sites. While it was important to maintain the goal of project continuity, it became clear that NP, PA, and health service management and policy (HSMP) students could not commit to more than two semesters to the project due to clinical rotations and conflicting schedules in the second year of their programs. Hence, the commitment for students was shortened to eighteen months or three semesters; the third semester was spent orienting new students to the project. During this period, students were expected to spend six to eight hours per month on their ISCOPEs project, including curricular time, project planning, and time at the community site.

• Didactic Session Attendance.

Initially, students were required to attend regularly scheduled didactic sessions addressing SL topics. A common protected period of time was secured in all of the academic programs to facilitate student attendance.

Student Orientation and Project Planning

At the completion of ISCOPEs' first year, an evaluation of the project, including the curriculum, revealed that the students wanted to have more scheduled time for project planning. Subsequently, during the second year, a student/faculty retreat was held to introduce curricular topics, facilitate orientation to the project and interaction

between the students and the preceptors, and address other issues pertinent to the successful beginning of the individual student teams.

SL Activities

Many students already were involved in community service activities either voluntarily or as part of their academic programs. The Steering Committee reviewed these activities and sought to expand these projects through ISCOPEs.

Year One

Eight community sites participated in ISCOPEs with one site hosting two student teams for a total of nine student teams. Forty-seven students participated (23 MD, 15 NP, 7 PA, and 2 HSMP).

The student teams designed health promotion and disease prevention programs for underserved populations such as Head Start pre-school children, senior citizens, the uninsured, recent immigrants from Central and Latin America, and low-income families and individuals.

Year Two

Four additional sites were recruited, for a total of twelve sites with fourteen student teams. Seventy-seven students participated (29 first and second year MD, 22 NP, 12 PA, and 14 HSMP). In April 1997, a poster presentation was held and thirteen student teams displayed the results and progress of their projects.

Projects included:

- Diabetes education and awareness;
- A health fair;
- Tuberculosis screening;
- Translation of health education materials into Spanish;
- Asthma education; and
- Breast cancer education and

screening.

Year Three

Fifteen community sites with seventeen student teams were involved. In this year, the number of students tripled since the inception of the project. A total of 137 students participated (77 MD, 28 NP, 13 PA, and 19 HSMP).

Some realignment of the community sites was done to accommodate student requests that the sites be within close proximity to the two universities (GMU in Northern Virginia and GWU in Washington, D.C.). Hence, seven new sites were introduced.

PROJECT ACHIEVEMENTS

The accomplishments of ISCOPEs are many. The greatest accomplishment has been the growth of the project and its institutionalization into the fabric of GWU and GMU. The enthusiasm expressed by the students and community-based organizations involved in the project also serve as indicators of the project's success. Another source of pride has been the presentation of the student teams' activities in the poster presentation sessions that were held at the end of each semester. These events were attended by community members and university officials, and highlighted the work of the teams toward the overall goal of the project: improving the health of the community. All of these benchmarks indicate the success of the project and the achievement of the goals and objectives originally outlined in the proposal to HPSISN.

The project has developed curriculum emphasizing the principles of COPC and interdisciplinary, SL projects that:

- Benefit students, community, and faculty; and
- Capture the goal of improving the health of the populations served by the community-based organizations that are partners in the project.

Participation Goals

The numerical goal regarding

participation has been approached in a somewhat less aggressive manner. In choosing to deliver a quality project that met the needs of the students, community, universities, and faculty, the project leadership and Long Range Planning Committee made the decision not to attempt to accommodate all students from all four academic programs during the third year. Instead of the 350 students originally stated in the proposal, 137 students participated during this period.

Student Development

ISCOPEs has provided students with field experiences that allow them to apply in practice concepts delivered in the classroom. Students are trained in CQI to assess the effectiveness of their projects. They also learn to understand cultural competence and gain an awareness of how the dynamics of culture affect the provision of health care.

Faculty Development

Faculty development activities provided avenues to develop and sustain both the academic and community preceptors. Faculty development workshops are conducted biannually to address orientation, curricular concepts, and other issues as identified by the preceptors and the Steering Committee.

Academic and Community Faculty

Benefits

The project's greatest success is in giving the community preceptors access to the university. This has been accomplished through offering adjunct faculty appointments and access to university library resources, electronic mail, and selected classes.

Providing benefits to academic faculty has been somewhat more complex. While ISCOPEs is a voluntary activity for academic faculty, during the project's third year, the chairman of the Department of Health Care Sciences in the medical school offered salary support to ISCOPEs faculty. For faculty in the other academic programs, workload adjustments have been made to accommodate ISCOPEs. In addition, efforts are underway to produce letters acknowledging individual faculty support to the project, which would be signed by all the deans governing the academic programs involved in ISCOPEs.

Institutional Commitment

The project leadership has continued to make incremental and important steps in the effort to assure ISCOPEs' programmatic inclusion as an integral component of the medical school curriculum, as well as broadening the institution's overall commitment to SL. The POM Curriculum Oversight Committee approved the inclusion of ISCOPEs as a formal part of the curriculum. Approval also was granted with a requirement of specific support for the time and effort of the ISCOPEs faculty. The need to identify teaching resources helped to stimulate the overall movement to establish new rules for recognizing and rewarding time and effort for all such nontraditional and increasingly time-consuming teaching

efforts.

Community Partners

The relationship between the project and its community partners has been a source of pride and accomplishment. ISCOPEs has enjoyed an excellent reputation in the community through the activities of the student teams and the Faculty Development Committee. Community interest in the program is growing, which makes it easy to find community-based organizations to serve as sites for the interdisciplinary teams. One recognized area of difficulty has been linking the sites to the university electronically. It was a goal of the project to facilitate the community sites' ability to have access to electronic mail. This has been difficult due to the lack of resources on both the community and university sides.

ISCOPEs Educational Materials

The materials produced for ISCOPEs include:

- Brochures, information sheets, and newsletters, which inform students, faculty, preceptors, community-based organizations, and the community-at-large about the project, its goals and objectives, and its value to the community;
- The Student Learning Contract, which documents students' commitment to the project;
- The Roles and Responsibilities Sheet, which informs students and academic and community preceptors about project expectations;
- The syllabus, which outlines in detail the concepts and topics covered in the curriculum;
- A Web page, which includes the syllabus for those students and faculty with Internet access; and
- An evaluation protocol and tools,

From: Seifer SD, Connors K and Seifer T. (editors). *Service-Learning in Health Profession Education: Case Studies from the Health Professions Schools in Service to the Nation Program*. San Francisco: Community-Campus Partnerships for Health, 2002.

which provide project data, document outcomes, and ascertain project progress toward goals.

These materials have served as a model for other SL projects. In particular, the Washington Regional Academic-Community Consortium (WRACC) has used the syllabus, online curriculum, and evaluation protocol and tools. WRACC is a collaborative project funded by the W. K. Kellogg Foundation Graduate Medical and Nursing Education Initiative to train graduate nurse practitioners and residents in community-focused primary care.

COMMUNITY PARTNERSHIPS

Partnership Development

ISCOPEs built on relationships the nurse practitioner and physician assistant programs already had with community-based organizations, making recruitment easy. The Steering Committee met with community leaders and health care providers to discuss the needs of the populations they served and to introduce the project. During the three years of the HPSISN-funded project, twenty-one community organizations served as sites for the interdisciplinary student teams. Sites were selected based on services provided, population served, willingness to host and precept students, and proximity to the universities.

Partnership Sustainability

Project continuity is one of ISCOPEs' objectives, which has helped to establish and maintain its credibility with community sites and assist in the evolution of these relationships. As ISCOPEs continues beyond the end of the grant period, it is anticipated that the relationships with our community partners will continue to flourish and evolve.

Community Agency Participation

Community health providers and staff served as community faculty preceptors. Several had the opportunity to share their project experiences at the national HPSISN annual conferences.

Community Agencies

- Bread for the City and Zacchaeus Free Clinic—Providing health care, legal services, and clothing for the uninsured population in Washington, D.C.
- D.C. Women's Cancer Coalition—Providing breast and cervical cancer screening and prevention.

- Family Health Connection Mobile Health Van—Providing health care for the low-income and uninsured populations in Prince William County, VA.
- For the Love of Children—Providing social programs for children.
- Glasgow Intermediate School—Providing programs for adolescents.
- GWU Health Plan—Serving the HMO population.
- Head Start (United Planning Organization)—Providing day care to infants and preschool children.
- Hope for Kids—Serving underserved, low-income children in Washington, D.C.
- Hospice Care of D.C.—Providing compassionate care with the goal of improving the quality of life for the terminally ill.
- Inova Alexandria Hospital—Working to improve the immunization rates for low-income children in Northern Virginia.
- Iona Senior Services—Serving senior citizens.
- La Clinica del Pueblo—Providing health care to immigrants from Latin and Central America.
- Mary's Center for Maternal and Child Health—Providing primary pediatric and prenatal care to underserved populations in the Adams Morgan area of Washington, D.C.
- Mobile Mammography Van of GWU—Providing breast cancer screening and prevention.
- Mobile Medical Van of Montgomery County—Providing primary care for the uninsured population in Montgomery County, MD.

- Montgomery County Department of Health and Human Services—Providing asthma care, treatment, and education to low-income children.
- N Street Village—Providing shelter and health care for homeless or formerly homeless women.
- NE Place—Providing primary care for adolescents.
- Pediatric Primary Care Mobile Van of Prince William County—Providing primary care for the uninsured children

of low-income families.

- Richard Montgomery High School—Providing programs for adolescents and teenagers.
- Washington Free Clinic—Providing primary care to low-income, uninsured persons.

PROJECT EVALUATION

From the beginning of the project, evaluating the progress and efficacy of the curriculum has been a priority. The Serial V model developed by Batalden, Nelson, and Roberts (1994) has been adapted and integrated for use as the theoretical model for the project. This framework progressively links process improvement cycles to identified goals and outcomes.

Evaluation Goals

The goals of evaluation were to determine the project's efficacy in the following areas:

- The fostering of a SL ethic through community-based projects in students seeking health care careers;
- The development and maintenance of effective community-university collaborative partnerships;
- The development of an effective collaborative, interdisciplinary learning model; and
- The development and practice of reflective learning and COPC/CQI skills.

Evaluation Methods

To evaluate ISCOPEs, community and academic faculty and the student representatives met to develop a shared understanding of the goals, objectives,

and implementation process. Evaluation instruments were developed based on the input of these partners. As the project progressed, the evaluation plan evolved and continued to be flexible to context. The request of the Steering Committee to involve the community preceptors and students in the evaluation development process served to renew the partners' enthusiasm and increase their participation. Hence, the practice of gathering input from all of the participants was continued throughout the entire project cycle.

Surveys and Focus Groups

In the first and second year of the project, survey instruments were the primary tools used to collect data. As the third year ended, focus groups were conducted, as well, to get more qualitative data on project performance and outcomes. Most recently, survey instruments for academic and community faculty preceptors have been conducted via telephone. This has proven to be most effective in increasing participation.

Data collection points were developed around learning activities. Evaluations were conducted at the end of each class,

for team meetings, and on the project in general. Each evaluation included questions that integrated knowledge, skills, and attitudes toward the activities rather than compartmentalizing each component. SL and reflection were valued and evaluated from a COPC perspective.

Poster Presentations

To measure and celebrate the progress of the student-run projects, the Curriculum Development Committee asked that student teams present their projects in a poster presentation at the end of each semester. This activity has been an excellent tool in ascertaining the student teams' level of understanding and their ability to apply the curricular concepts in practice.

Utilization of Data

Evaluation findings were presented to the Steering Committee for discussion and interpretation. The data guided the Steering Committee through important decisions regarding project policy, implementation, and direction, and revision of curriculum and faculty development activities. In addition, several faculty members were able to use this data as the basis for research on interdisciplinary, collaborative projects.

Data also were shared with the community partners to assist in interpretation and dissemination of the feedback.

Evaluation Committee

A major factor that facilitated the evaluation of the project was the commitment and willingness of the Evaluation Committee. This group of faculty, led first by Deborah Gardner and then by Bernard Horak, worked consistently to ensure that the goals of the project, the evaluation component, and HPSISN were accomplished. The work of this group demonstrated the interdisciplinary, collaborative spirit that permeated this project from the beginning. As faculty members have moved on to other projects, the focus of this group has been steady and clear.

This dedication has been most evident in the diligent efforts to increase and improve student and faculty participation in the evaluation process, which has been the major challenge to evaluation. While these partners acknowledge the importance of evaluation, it has been a learning process to adapt the tools and instruments to accommodate student and faculty time constraints.

PROJECT SUSTAINABILITY

The Steering Committee anticipates that SL will continue to be an important component in the education of health professionals in all disciplines and levels. The successful accomplishment of the goals and objectives of the project helped to determine the future continuation of ISCOPEs. This success and the growing national recognition of SL have helped persuade the deans governing the four academic programs

to provide support for an expanded ISCOPEs project. This budget has enabled ISCOPEs to be institutionalized and to financially compensate the academic faculty involved. Thus, ISCOPEs not only has survived, it also has expanded, during the fiscal crisis that is faced by most academic health centers today. ISCOPEs has served as a catalyst for the continued development of critical, interdisciplinary, and SL

activities for the GWU and GMU health professions students.

SL activities have been an integral part of health professions training at both universities over the last decade. The commitment to serve underserved and low-income members of the community has been manifested both formally and informally in the policies and practices at GWU and GMU:

- ISCOPEES was started on the heels of a project of the Institute for Healthcare Improvement (IHI), which began in fall 1994 and involved some of the faculty who later became ISCOPEES participants. The IHI project had the goal of developing an integrated curriculum that gives students the knowledge, skills, and attitudes needed to lead improvement in a managed care environment utilizing the principles of CQI.
- Formal community service requirements have been in place for both NP and PA students.
- For medical and HSMP students,

more informal activities were encouraged and supported.

Recent evidence of the universities' commitment to SL include:

- The recent partnership of Universal Health Systems (UHS) with George Washington University Hospital. UHS has made a commitment to continue service to the uninsured.
- The inauguration of the new School of Public Health and Health Services at GWU.
- The increased level of collaboration between all of the health professions programs with respect to sharing much needed community-based clinical sites and COPC curriculum innovation.
- GMU's requiring SL in the New Century College for undergraduate students who select this option, and continuing SL experiences for NP students.

PROJECT IDENTITY

While the forces driving ISCOPEES were largely external, the HPSISN grant provided an important incentive that was helpful in getting interested parties at GWU and GMU together. Out of this has come a series of collaborations, including the WRACC, which has a significantly increased funding level from the W. K. Kellogg Foundation Graduate Medical and Nursing Education Initiative. WRACC is a regional, collaborative effort between academic institutions, community-based organizations, and Inova Health Systems. This project, like ISCOPEES, strives to develop interdisciplinary, community-based education and practice models for residents and graduate nurse

practitioner students. This is a direct outgrowth of the work begun with IHI and continued in the ISCOPEES program. Thus, HPSISN has been very helpful in generating local movement toward community involvement and SL.

The HPSISN project also has helped GWU and GMU receive recognition for having been chosen to participate in a national demonstration project. This supports the position of the project leadership that promoting SL is appropriate and necessary. The networking opportunities that have grown out of the participation in the HPSISN Program have been valuable. In addition, several faculty and students have been able to submit the findings

and experiences from ISCOPEs for various presentations and publications.

LESSONS LEARNED

Several themes have emerged from the administration and implementation of the interdisciplinary, collaborative project. Institutionalization of this type of project requires personal commitment, passion, knowledge of internal and external politics, and accessibility to key individuals and committees at the university and in the community.

Develop effective communication methods. Communication is key, both externally and internally. While it was anticipated that efforts to strengthen and enhance the lines of communication between the community and the universities, faculty and students, and the two universities would be necessary, it became apparent that intra-university communication was equally important and critical. Electronic mail provided essential linkages between the various partners in the project. However, getting the community partners “e-mail ready” has remained a challenge.

Engage students in the process. Student participation in the process is invaluable. Student feedback is critical to problem solving and program planning. Students offer insight into how nontraditional teaching modalities and curriculum will be received.

Develop a healthy partnership with the community. Cultivating and maintaining effective and productive relationships with community-based

organizations are essential aspects in a collaborative project. It is mandatory to gather input from the community partners of the project on program planning and implementation.

Evaluate the project. Another effective tool in interdisciplinary projects is evaluation. Evaluation has been paramount in providing the data needed to assess progress toward goals and detect areas for improvement throughout the project.

Never underestimate the challenge of accommodating everyone’s schedules. The task of working with four academic programs at two universities has presented the constant challenge of accommodating the schedules of the different academic programs. Scheduling protected time for didactic sessions, student team meetings, meetings and workshops with academic and community faculty, and meetings of the Steering Committee are all affected by this dynamic. Flexibility and willingness to compromise are key to negotiating and resolving these difficulties.

Cristal M. Piper is the SL administrator. Bernard J. Horak is the director and lead evaluator. Denice Cora-Bramble and Doreen Harper are co-principal investigators. Janet Hale and Gene Kallenberd are senior advisors.

POSTSCRIPT

The previous discussion covered activities during the three years of the HPSISN grant. Below are new developments since the case was originally published in July 1998.

New Community Sites

The following six community sites or agencies were added:

- Healthy Start—Providing health services as an extension of the Women/Infant/Child Program (WIC).
- Lutheran Social Services—Providing health care and other services for indigent immigrants.
- Miriam’s Kitchen—Providing health care to the homeless.
- Whitman Walker Clinic—Providing health care for indigent AIDS patients.
- Stop Child Abuse Now (SCAN)—Providing health promotion interventions for parents and children.

New Disciplines

In the fall of 1998, students from the master’s program in public health (MPH) were added. Included were students from concentrations in maternal/child health, health disease/health promotion, administrative medicine, and community-oriented primary care. In the fall of 1999, students from the master’s program in physical therapy (PT) were added.

Recent Student Numbers:

Program	Number of Student Participants	
	1998	1999
Medicine	50	93

Nurse Practitioner	24	26
Physician Assistant	16	17
Health Services	36	41
Public Health	23	67
Physical Therapy	0	16
Total	149	260

Student Team-Building

Since the number of disciplines/programs and students greatly increased, the need for more extensive team-building was necessary. Thus, at the kick-off meeting, all teams go through a facilitated and structured team-building session that includes:

- Discussion of what each student and discipline can offer to the team;
- Identification of the characteristics of an ideal team;
- Clarification of roles that each would play on the team; and
- The setting of ground rules for working together.

Peer Evaluations

Under development is a system of peer evaluations so that each student can receive feedback on how they performed as a fellow team member. This would occur twice during the semester.

Student Representatives

The student representatives have formed a strong advisory body to provide direct input at Steering Committee meetings. This group spends considerable additional time outside of the Steering Committee developing recommendations on such policies as peer evaluations, termination of students from the program, format of poster session,

curriculum needs, and educational approaches.

Facilitators

The Health Services Management and Policy (HSMP) students now all serve as facilitators of their respective teams. They have been of invaluable assistance to the teams in moving the project forward. The facilitators are responsible for developing agendas, enforcing team ground rules, managing group process, using the CQI tools, and documenting team progress.

Journals

Students in the HSMP and the NP

programs are using journals to document their experiences and what they have learned. The journals have been an excellent tool for reflection and for assessing each student's level of learning and growth. Consideration is now being given for using journals in all other programs.

Outcomes

Teams are now responsible for defining outcomes to assess the effectiveness of their interventions. Specific outcome measures are being set during the planning phase of the team's project.