

School of Public Health and Community Agencies Collaborate to Train Students and Improve Population Health

Nathalie A. Bartle, EdD; Linda Lloyd, PhD; Augusta Villanueva, PhD;
David Tollerud, MD, MPH

The first School of Public Health (SPH) in Philadelphia was founded in 1994, and the first class of Masters of Public Health (MPH) students was admitted in 1996. Guided by its core values, the school is committed to: population health improvement; analytic and systems thinking; effective communication; sensitivity to cultural and human diversity; community respect and partnership; human rights and social justice; quality learning; and continuous self-assessment and evaluation. Two key components of the school's two-year inquiry-driven, integrated and applied curriculum model are: 1) problem-based learning which relies on cases to teach students the core disciplines of public health; and 2) community-based learning founded on Service-Learning (S-L) principles which require students to develop their public health practice skills by working in and with the community to improve population health.

School of public health and community collaborations

The first year of the MPH program is designed to introduce students to the diversity of populations, groups, and systems comprising the public health arena through visits to 20–25 community sites and 16 resources sessions over the academic year. Students are introduced to Service-Learning principles through workshops and hands-on activities in the community, which include a half-day S-L activity at a designated community site and a full-time community practicum experience during the last four weeks of the first year.

A natural extension of the S-L experience is the Year II community-based master's project (CBMP) in which students participate one and a half days per week throughout the academic year, in a longitudinal, structured learning experience linked to serving the community while completing a master's project. From a database of community organizations that provide optimal learning sites for public health students, individual students select a site in consultation with their CBMP chair and the director of the CBMP program. Sites are selected on the basis of a defined problem, the academic objectives of the student's chosen public health discipline, the agency's commitment to assigning an appropriate preceptor, and the student's individual interests. Over the past three years, 19 public health students have completed projects in collaboration with the Philadelphia Public Health Department (PDPH). Another 38 students completed their master's project while working in grassroots community agencies, in organizations affiliated with the health care system, or in a local legal agency.

The development and completion of a CBMP is a pivotal activity of the second year experience. Student projects vary across public health disciplines but have in common that they address an identified need of the host organization and are of value to the community or population group served by the organization. Projects are guided by faculty, who supervise its development and successful completion.

Students engage in the implementation and documentation of their CBMP between August and April of the academic year, and a comprehensive paper is

submitted in May. This paper may take a variety of forms—needs assessment, program evaluation, research project, data analysis, or policy development.

To complete the CBMP, students must fulfill the requirements of a traditional master's thesis, as well as an oral defense and poster presentation. Many students prepare an applied report for the host agency, and, when appropriate, some students make an oral presentation at their community site. As students conduct their studies in the context of a community setting, they also have numerous opportunities to further develop and sharpen their public health practice skills. Thus, the learning objectives for the second year experience include specific competencies related to designing and completing a comprehensive academic project, and further developing skills that will lead to their becoming an effective public health practitioner.

Supervision

Students are supervised in their CBMP experiences by a committee consisting of a faculty member from the student's chosen discipline who serves as chair, the community preceptor, and additional faculty as appropriate. Sponsoring agencies ensure that each preceptor has adequate time within his/her working schedule to meet the educational needs of the assigned student. CBMP committees generally meet monthly, and students meet with faculty chairs and community preceptors individually as needed. Students often consult with other public health or university faculty about specific questions related to their project (e.g., survey development, IRB process, and data collection and analysis).

Infrastructure to support CBMP activities

To enhance knowledge areas and professional skills needed to successfully complete the CBMP, skill development seminars and reflection sessions are held every other week throughout the second year. This allows students to engage in group discussions and think about the significance of their on-site experiences, including specific interactions or events taking place within the host organization. Seminars focus on such topics as building collaborative affiliations with organizations, identifying ethical guidelines for working in the community, reviewing the history of the protection of human subjects and IRB processes in academic and community settings, developing an integrated research study design, identifying appropriate theoretical models for a particular study, reviewing qualitative and quantitative data collection and data analysis methods, and designing poster presentations.

Benefits

A selected list of student projects and sites is shown in the table below.

Formative evaluations indicate that numerous benefits have accrued to the sponsoring agency, the student and the School of Public Health. For instance, student projects have been used to address the needs—"wish lists"—among staff at the PDPH. The preceptor of one student who conducted a study on asthma prevalence and environmental risk factors in family-based day care centers regulated by the PDPH noted, "having a student allowed us to address an important problem that we never have had the time to do." Some projects have promoted policy changes at the local and state level, such as a project that looked at Women, Infants and Children (WIC) food

packages guidelines among Asian women. The findings of this project led local and state WIC offices to institute changes compatible with the Asian culture. In another project, the evaluation of a gun buy-back program in Delaware County provided important data for the District Attorney to support continuation of the program. The community preceptor at a homeless shelter where a student conducted an evaluation of one of the shelter's educational programs said, "No one has ever evaluated our program before, and the evaluation really will help us grow and improve."

Other projects have resulted in changes related to data collection methods and analysis. A preceptor at the Office of Maternal and Child Health at the PDPH pointed out, "We all learned along with the student...her project facilitated our self-examination in a critical area." Knowledge and skills of agency staff were often enhanced by a student's work. "He provided the Temporary Assistance for Needy Families (TANF) Compliance Team with an extensive library of journal articles addressing the issue of welfare reform...his presence has been a positive asset that all members of the compliance team appreciate." Some projects facilitated the development of meaningful relationships among public health students and faculty, agency staff and the constituents served. One preceptor summed it up, "The student not only worked to meet the agency need, but also worked to meet a very real need in the Latino community." Another preceptor at the PDPH Lead Poisoning Prevention Division noted that "the student brought a fresh viewpoint to the problems we work on, and she worked with an enthusiasm that made people on my staff want to work with her."

Students benefit by having community preceptors who later become mentors. As one student notes, her community preceptor "was an amazing resource . . . she took me to meetings and gave me opportunities to be exposed to a variety of audiences and topics." Most commented that public health practice skills in areas such as critical thinking and analytical skills, communication, collaboration, the setting of priorities and time management improved. Students also learned how to work with diverse populations and come face-to-face with human rights issues. Most importantly, they learned how to design and complete a comprehensive project. Oral presentation skills also improved—one student said that by the end of the experience she was "definitely not afraid to speak her piece about a given subject."

Challenges and obstacles

Although the program is producing positive outcomes for students and community organizations, there continue to be barriers that impede the achievement of stated goals. Institutional Review Board (IRB) procedures both at the university and the agency are not always well-suited to evaluate community service/academic collaborations, and are particularly difficult when students have to obtain approval from both academic and community IRBs. Because of time constraints with the IRB process, students have sometimes had to modify initial study designs. As an example, some students developed and piloted a survey questionnaire, but were unable to administer it due to delays in receiving IRB approval.

Negotiating the differences in work cultures and expectations is often a challenge—students have a natural tendency to "reach beyond their grasp," developing projects that are too ambitious for the time allotted and which pose time management issues. In addition, consistent supervision by the student's CBMP committee is often

constrained by the many other responsibilities that faculty and community preceptors must assume.

Looking ahead

As a result of this program, the number and diversity of projects and affiliations between SPH faculty and various community agencies have grown dramatically. Faculty have benefited from research projects, agency assistance in staff development, workshops at the community site, and consulting opportunities. Members of community agencies have enrolled in the part-time MPH program, developed relationships with individual faculty to collaborate on research, and participated in resource sessions at the school.

The challenges of funding and providing faculty support for this model of service and learning are perhaps the most significant obstacle to its continuing success. There must be a consistent infrastructure to support such a multi-faceted program. Sufficient faculty must be on hand to provide consistent, quality supervision to CBMPs and address numerous administrative issues that develop—negotiating affiliations with a wide array of community organizations, identifying appropriate placements for students, and providing consistent program oversight.

Considering the community perception that academic institutions have “taken a lot and given little” in these community partnerships, the school has given careful thought and attention to building collaborative partnerships that provided positive community benefits.

Lessons learned

A few key lessons should be considered for any group considering this type of program. First, students need to be clear about what they are expected to do in and with the community, and the school must delineate expectations and community experience requirements with student candidates during admission interviews. Second, organizations who can act as placement opportunities should be identified. These organizations must have staff with the skills and expertise needed to precept a student. Third, the school should develop program goals, specific objectives, and structured activities to accomplish these objectives. Fourth, students should be given sufficient time for a longitudinal experience at a community site (1 1/2 days per week over one academic year is preferable to students’ spending 4-6 weeks full-time).

Our fifth recommendation is that the school provide an infrastructure that will support the tasks involved in designing and completing a comprehensive project. Students should be involved in decisions regarding community placement and projects, and supervision should be clearly defined. Joint training should be initiated whenever possible. Finally, the school should recognize and reward community organizations and preceptors who are willing to become partners in this type of an endeavor. We have used our poster presentation event as a time to recognize and show our appreciation to the agencies and the preceptors, by presenting them with certificates and a special gift from the School of Public Health.

The increasing emphasis on training public health students to become effective public health practitioners, and the opportunity to improve population health as students learn, make it imperative that public health academic institutions integrate structured community-based learning into their curricula.

The authors regularly serve as committee chairs for student CPMPs.

Student Projects and Host Agencies

Topic of Student Project

Community Site

Evaluation of a family planning clinic within an STD clinic	Philadelphia Department of Public Health
Development of nutritional guidelines for the Asian community to gain WIC approval	Philadelphia Department of Public Health
Investigation of barriers to antiretroviral therapy in HIV positive pregnant women	Philadelphia Department of Public Health
Assessment of the effectiveness of an educational training program; reduction of the risk for Lyme disease exposure	Philadelphia Department of Public Health
Identification of ways to decrease emergency room utilization	Health Partners
Development of a survey instrument to assess fathering roles of African American males	Health Federation
Identification of employment barriers affecting Latino welfare recipients and their families	Congreso de Latinos Unidos
Evaluation of the Delaware County Goods for Guns Coalition	Delaware County District Attorney's Office
Development of a manual for the organizers of migrant farm workers	Farmworkers Support Group in New Jersey

[Back to Top](#)

[Back to *The Link Page*](#)