Service-Learning
An Integral Part of Undergraduate Public Health

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Abstract: In 2003, the Institute of Medicine (IOM) described public health as "an essential part of the training of citizens," a body of knowledge needed to achieve a public health literate citizenry. To achieve that end, the IOM recommended that "all undergraduates should have access to education in public health." Service-learning, a type of experiential learning, is an effective and appropriate vehicle for teaching public health and developing public health literacy. While relatively new to public health, service-learning has its historical roots in undergraduate education and has been shown to enhance students' understanding of course relevance, change student and faculty attitudes, encourage support for community initiatives, and increase student and faculty volunteerism. Grounded in collaborative relationships, service-learning grows from authentic partnerships between communities and educational institutions. Through emphasizing reciprocal learning and reflective practice, service-learning helps students develop skills needed to be effective in working with communities and ultimately achieve social change. With public health's enduring focus on social justice, introducing undergraduate students to public health through the vehicle of service-learning as part of introductory public health core courses or public health electives will help ensure that our young people are able to contribute to developing healthy communities, thus achieving the IOM's vision.
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Introduction

In its seminal 2003 report entitled *Who Will Keep the Public Healthy?*,[1] the IOM described public health as "an essential part of the training of citizens" and noted the importance of what it termed *public health literacy*. According to the IOM, public health literacy encompasses a recognition and understanding of how the social and physical environment shape health. In asserting that public health literacy is an "appropriate and worthy" social goal, the IOM recommended that "all undergraduates should have access to education in public health." While it noted the importance of basing this education on an ecologic model, the IOM was silent regarding the specific vehicles and approaches that would best result in a citizenry that is public health literate. It is our assertion that the vehicle of service-learning, a type of experiential learning, is an appropriate and effective approach for teaching undergraduate public health.

In contrast to experiential learning generically, service-learning is grounded in collaborative relationships and emphasizes the development of engaged civil sectors and student civic participation. The long-term aim of service-learning is social change and social justice—through the service provided by students as well as through their lifelong commitment to community engagement. In this article we set service-learning within the context of experiential learning, identify its components, summarize highlights of the impact of service-learning, and offer resources along with a case example. We also note the importance of local and state public health agencies as appropriate and relevant service-learning partners for undergraduate students.

Experiential Learning

Experiential learning, an approach to learning that encompasses service-learning, is a term used to describe learning undertaken by students who are given a chance to acquire and apply knowledge and skills in an immediate and relevant setting. It links theory and practice, and involves a "direct encounter with the phenomena being studied rather than merely thinking about the encounter, or only considering the possibility of doing something about it."[2] It is, in short, education that "occurs as a direct participation in the events of life."[3]

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Experiential education as a philosophy can be linked directly to three historical figures—John Dewey, Kurt Hahn, and Paulo Freire—all of whom viewed student experiences as playing a central role in the educational process.[5] For each of these educators, the ultimate aim of education was active citizenship, that is, the development and enhancement of one's capacity to participate in democracy.

Experiential education differs from more traditional education through its process of actively engaging students in experiences that have benefits and consequences. Immersed in action, students make discoveries and experiment with knowledge themselves instead of hearing or reading about others' experiences. They also reflect on these experiences, thus developing new skills, new attitudes, and new theories or ways of thinking.[4] Students are encouraged to relate their experiences to existing knowledge and theory, thus deepening their understanding of theory as it exists or contributing to theory modifications.

Service-Learning

As a type of experiential learning, service-learning has a long and substantial history. The origins of service-learning are directly traceable to the early 20th century's University of Cincinnati's Cooperative Education Movement as well as to William James and John Dewey's pedagogic writings.[6] Service-learning is:

> a structured learning experience that combines community service with preparation and reflection. Students engaged in service-learning provide community service in response to community-identified concerns and learn about the context in which service is provided, the connection between their service and their academic coursework, and their roles as citizens.[7]

In distinguishing service-learning from volunteerism on the one hand and internships on the other, Furco[8] stresses that service-learning is distinguished from other forms of experiential education by its "intention to benefit equally the provider and the recipient of the service as well as to ensure equal focus on both the service being provided and the learning that is occurring." While service-learning is sometimes considered to be synonymous with internships, they are actually very different approaches to learning. In internships, students are the primary beneficiaries, with the experience structured to facilitate student learning and acquisition of practical skills. Frequently, internships are adjunctive to classroom courses. In service-learning, service is integrated into the coursework and co-occurs with it, with the goal of placing equal emphasis on student learning and the provision of meaningful community service.

As a pedagogic methodology, service-learning promotes learning through a cycle of action and reflection. Students apply what they are learning in the classroom to community issues, and at the same time reflect on their experiences as they strive to achieve specific objectives with and for the community as well as deeper understanding and skills for themselves. Furco points out that service-learning programs must have an academic context and be designed so that the service enhances the learning and the learning enhances the service. In short, the service component is integrated into the course curriculum. In public health education, service-learning can fit well into core public health courses as well as be featured as part of public health electives and practicum experiences.

Service-learning comprises several components that can be thought of as spokes of a wheel.[9] This suggests that the process is nonlinear and one in which entry may occur along any of the supporting spokes. Nevertheless, establishing the community campus partnership is generally considered to be an essential first step. The spokes consist of the following components:

1. **Establish the community–campus partnership**. Authentic partnerships are founded on a shared mission, values, goals and outcomes; a relationship characterized by mutual trust, respect, and commitment; a balance of power and sharing of resources; bi-directional communication; agreed-upon roles, norms, and processes; and shared credit. Partnerships take time to develop and evolve with time.
2. **Articulate learner outcomes and competencies.** Specific learning objectives and outcomes to which both the academic and the community faculty agree help make the transition from a classroom-based curriculum to a community-based collaborative model of learning and teaching.
3. **Select texts and other learning resources**. Expanding the potential sources of teaching and learning materials to include items that community partners suggest helps ensure that resources include community voices.
4. **Plan course instruction and activities**. Service-learning methodology calls for community needs and interests to contribute to determining a course's scope and activities. As a hallmark of service-learning, reflection is always included; it helps students make the connection between their service experiences and classroom instruction.
5. **Design course evaluation and improvement plans**. Developing and implementing a multi-tiered evaluation approach helps ensure that assessments include approaches related to student learning outcomes as well as community-, faculty-, institutional-, and partnership-related outcomes.
6. **Build course or program infrastructure.** Service-learning courses must follow required institutional

policies and procedures as well as capture relevant community organizations' interest and support.

7. **Sustain and maintain course and activities**. Incorporating structural elements that mesh with the institution's and community agency's philosophy and mission as well as reflect state and local health objectives can help ensure that service-learning courses are sustained.

8. **Practice cultural humility.** Service-learning courses provide opportunities for meaningful culture-related assessments and interventions to occur at multiple levels, including: the personal, partnership, institutional, faculty, student, and community.

9. **Develop community-engaged scholarship.** The community academic partnerships required for service-learning courses provide opportunities for scholarship that benefits the institution/faculty and the community. Often transdisciplinary, community-engaged scholarship integrates the scholarship of teaching, discovery, and application.

While relatively new to public health, service-learning has its historical roots in undergraduate education, where it has been shown to positively influence students' personal development, leadership, and communication skills; racial and cultural understanding; sense of social and civic responsibility; course content learning and ability to apply classroom learning in real-world situations.[10]

Over 25 years ago, in describing higher education's social responsibilities, Derek Bok, president of Harvard University, noted the importance of the community as a locus for education and research.[11] In a seminal piece on scholarship, Ernest Boyer, another well-known educator, urged universities to engage with communities as a way of developing knowledge and contributing to student education as well as of applying knowledge.[12] While universities have long related to communities for the purpose of educating students and carrying out research, through service-learning the emphasis expands to assure that community needs are also met. It is noteworthy that the recent Consensus Report on Public Health and Undergraduate Education[13] recommends that experiential education such as service-learning be a component of undergraduate public health and an integral part of a public health minor.

In the health professions, service-learning has been conceived "not only as a strategy for preparing community-responsive and competent health professionals, but also as a strategy for changing the relationship between communities and . . . schools, fostering citizenship, and achieving social change."[7] The Health Professions Schools in Service to the Nation (HPSISN) program, the only national demonstration program of service-learning in the health professions, documented these benefits across a wide range of institutional and community contexts.[14,15] Students participating in the HPSISN program, for example, benefited from transformational learning experiences that clarified values, increased awareness of the social determinants of health, deepened their sensitivity to diversity, broadened their knowledge of health policy issues, and provided leadership development opportunities. Short-term benefits for participating community partners included expanded services, access to grant funding, and increased awareness of university assets and limitations, while long-term benefits included volunteer and staff recruitment and retention.

Achieving a Balance Between Service and Learning

Service-learning strives to achieve a balance between service and learning objectives; in service-learning, partners negotiate the differences between their needs and their expectations. Service-learning places an emphasis on addressing community concerns and grows from authentic partnerships between communities and educational institutions. Importantly, service-learning emphasizes reciprocal learning. In service-learning, traditional definitions of *faculty*, *teacher*, and *learner* are intentionally blurred. Everyone becomes a learner. In emphasizing reflective practice, service-learning helps students make the connection between practice and theory while fostering critical thinking. Critical thinking enables learners to analyze, synthesize, evaluate, and explain their thinking, thus decreasing the likelihood of acting on false premises.[16] Finally, service-learning places an emphasis on developing citizenship skills and achieving social change. Through this educational modality, students place their roles as future citizens and professionals in a larger societal context.[7] Thus, service-learning is a teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities.

In achieving a balance between service and learning, authentic service-learning experiences have several common characteristics.[17] They:

1. are positive, meaningful and real to the participants;
2. involve cooperative rather than competitive experiences and thus promote skills associated with teamwork and community involvement and citizenship;
3. address complex problems in complex settings rather than simplified problems in isolation;
4. include a reflection component that helps students synthesize their theoretical and practical learnings;
5. offer opportunities to engage in problem-solving by requiring participants to gain knowledge of the specific context of their service-learning activity and community challenges, rather than only to draw upon generalized or abstract knowledge such as might come from a textbook; as a result, service-

learning offers powerful opportunities to acquire the habits of critical thinking, particularly, the ability to identify the most important questions or issues within a real-world situation;

6. promote deeper learning because the results are immediate and uncontrived; there are no "right answers" in the back of the book; and

7. are reciprocal in nature, benefiting both the community and the service providers by combining a service experience with a learning experience.

Impact of Service-Learning

As a consequence of this immediacy of experience, service-learning is more likely to be personally meaningful to participants and to generate emotional responses. In addition, it challenges values as well as ideas, thereby supporting social, emotional, and cognitive learning and development. Service-learning in undergraduate curricula has been shown to enhance students' understanding of the relevance of course content, change student and faculty attitudes, encourage support for community initiatives, and increase student and faculty volunteerism.[10,18,19]

Among the features of service-learning that make it an appropriate and relevant vehicle for undergraduate public health education is its emphasis on developing citizenship skills and achieving social change. As a profession committed to social justice, public health has generally placed a high value on vehicles through which students can place their theoretical knowledge into practice and larger context. Service-learning stresses the importance of students' understanding and learning how to intervene on the multiple factors that affect health and quality of life. With its recent emphasis on eliminating disparities in health status, public health is well served in using service-learning as a pedagogic modality to enrich and deepen student learning and skill development.[20] Further, the evaluation of the HPSISN program concluded that students benefited most from service-learning activities that addressed the social determinants of health rather than medical care.[14]

The stakeholders in service-learning are multiple and all stand to gain from the use of this modality. Stakeholders include students, faculty, academic institutions, community-based organizations, community members, and municipalities. Because it is predicated on an authentic partnership between the academic institution and the community, service-learning changes the way these stakeholders relate to one another.[21,22] Community organizations and community members become teachers in a co-learning environment, as academic faculty deepen their understanding of a community's structure, assets, challenges and priorities.[15] Students' skill development is no longer the sole or even the prime rationale for the experience. Rather, the student

is more likely to become integrated into ongoing community program development and implementation initiatives. With public health traditionally focused on cataloguing and acting on a community's deficits, service-learning opportunities aim to help students understand that all communities have assets and that strengthening those assets can be an effective way to reduce and counteract the community's challenges.[23] In summary, service-learning holds great promise for achieving the vision of the IOM report.

Example

Placing students in community organizations and settings for specific learning experiences needs to grow from partnerships between the academy and the community. Given what for at least some schools has been a troubled town–gown relationship, knowing the historical legacy of this relationship is fundamental to developing balanced, respectful partnerships for learning.[21,22] While becoming acquainted with and acknowledging elements of this historical legacy, faculty can identify organizations with which they might develop partnering arrangements for service-learning. Partners particularly well situated for helping students understand the principles and essential elements of public health as well as the role and function of epidemiology are local, county, city, and/or state health departments.[24] It is in these health departments that much of the core activity related to public health is carried out. These departments are often understaffed, so having competent, energetic students can be a benefit, even with the added responsibility of precepting that student. Faculty should not view this first step lightly, however, for developing and nurturing partnerships with community organizations is a time-consuming endeavor; it often requires months of getting to know one another and of conversations that lay the groundwork for long-term relationships built on trust and respect.

Specifying learner outcomes and competencies is a key element in service-learning. Taking time to articulate student learning goals helps ensure that the experiential elements provide opportunities that move from volunteerism to genuine service-learning. Working with their community partners, faculty should specify learning and service objectives as well as separate service-learning objectives. To help prepare students for experiences in a range of public health agencies and organizations, the course materials should include background information at the micro level (specifics about the history of the organization as well as the types of clients usually see) as well as the macro level (role and function of public health broadly). Students placed in a health department to work on issues related to a high incidence of babies born with low birth weights, for example, might have as a learning objective to identify the conditions that contribute to babies being

born with low birth weights. The service objective might be to provide supportive services to mothers and their newborns through the department's Healthy Start Initiative. The service-learning objective might be to work with advocates to write a policy statement aimed at ensuring that an adequate and accessible supply of primary prevention and health promotion services are available for women.

When placing students in public health agencies, faculty are often challenged by the need to allow community needs and interests to contribute to determining the scope of students' activities. Accustomed to control in the classroom, faculty must find ways to become comfortable with sharing that control.[24] Community partners are key to helping students expand their frames of reference and understanding so that they are more comfortable and competent working with community members, especially if those members come from communities different from their own. Additionally, it is often the community partners who enable students and faculty alike to see the resources and assets that are present in any community, no matter how distressed.

For the course to be a service-learning course, a bridge—usually consisting of reflection activities—must be present to make the explicit link between service and learning. Methods for reflection include dialogue, keeping a journal, photo-voice, and electronic discussion groups. In the example of students placed with a health department and working on issues related to reducing the incidence of babies born with low birth weights, students could benefit from keeping a journal in which they record their thoughts and feelings about why women find themselves unable to obtain recommended prenatal care services. They might also ponder why a certain array of services is more available in some communities that in others, why some women might be fearful and mistrustful of the medical and public health establishment, or why certain women enter child-bearing years healthy and fit while others enter these years with their health status compromised. In addition to keeping journals, students might also engage in small-group discussions where they can share their perspectives and experiences, including exploring their own values, beliefs, and stereotypes.

Every course benefits from having course evaluation and improvement plans. In the case of service-learning courses, this means that in addition to university-based faculty and students who traditionally assess and comment on a course, community-based faculty and community beneficiaries of the students' endeavors are also encouraged to provide feedback. For example, in our case example, health department personnel as well as community members with whom the students worked would be invited to provide systematic feedback.

Developing a new course requires complying with institutional policies and procedures for offering new courses. Faculty must to determine whether the course will need curriculum committee approval or whether the course could be considered a revision of an existing one. Gaining support for the service-learning course from deans, department leaders, faculty, students, and community partners can be helpful in the early part of this approval process. Areas to consider in building support include benefits/risks to the institution and the community, how the course can help students achieve specific competencies, and the identification of colleagues or partners who can be helpful.

Decisions will need to be made about number of credit hours to assign the course, distribution of time spent in the classroom and in the community, and whether to pilot the service-learning component with a selected number of students or require it of all students. These decisions depend in part on the time and infrastructure support available to the faculty member. For example, a university with a campuswide center for service-learning may be able to offer release time for faculty to design new service-learning courses or may be able to leverage existing community relationships so a faculty member does not have to start from scratch. One should not underestimate the amount of time required to develop and teach a service-learning course: it is greater than a traditional in-class lecture course and requires a high degree of on-going face time between instructor and community partner. Faculty on campuses with offices of service-learning or of community partnerships should use these resources. Additional resources can be found through Community–Campus Partnerships for Health (www.ccph.info),[25] State Campus Compacts (www.compact.org), The Corporation for National and Community Service (www.cns.gov) and Area Health Education Centers or AHECs (www.nationalahec.org).

Service-learning opportunities in health departments and in any of many other community-based public health organizations will expose students to the issue of health disparities and the nation's goals to eliminate them. Before being placed in a community agency, students might complete a self-assessment of their own cultural awareness, learn more about cultural groups with which they will be working, and be encouraged to discuss their feelings and human tendency to stereotype as part of their reflective journals.

Service and service-learning can become areas of excellence and an asset in faculty promotion and tenure when they become scholarship. The Report of the Commission on Community-Engaged Scholarship in the Health Professions defines community-engaged scholarship as "scholarship that involves the faculty member in a mutually beneficial partnership with the community . . . . [it] can be transdisciplinary and often integrates some combination of multiple forms of

scholarship . . . . service-learning can integrate the scholarship of teaching, application, and engagement . . ."[26] In developing service-learning in undergraduate education, faculty should be aware of opportunities to use the experiences to inform their teaching, research, and service.

Conclusion

Undergraduate public health can help us achieve the IOM's goal of a citizenry that is literate in public health. Using service-learning as a pedagogic method to teach public health will advance public health literacy while encouraging the development of young people who have a deep understanding of the influence that culture, class, economic status, neighborhood of residence, and education have on an individual's and a community's health. With its emphasis on reciprocal learning and reflective practice, service-learning can help ensure that students who pursue public health studies as undergraduates enter their adult lives prepared to make positive contributions to the nation's health.

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