Service Learning Within the University of Connecticut Master of Public Health Program

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SYNOPSIS

Since 2005, the University of Connecticut Master of Public Health Program has administered its required service-learning practicum through coordinated activities of second-year students assigned to examine a pressing public health issue in Connecticut. The initiative underscores our program's commitment to preparing students for careers as leaders in applied practice and our emphasis on collaboration. Our thematic approach links content across the core curriculum, provides a venue where students demonstrate mastery of academic principles, and affirms values of public responsibility and common purpose. Projects have focused on public health concerns associated with childhood obesity, health literacy, and living with disabilities. Working together and with community-based preceptors, students estimate service needs, assess available program/service capacity, and recommend policy options. Results are compiled within a written report that accompanies a state legislative hearing. This article presents the rationale and organization of our service-learning practicum, and describes how the experience affects the education and personal growth of students and contributes positively to the community at large.

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Despite the widely held premise that public health is "what we do collectively to assure conditions by which people can be healthy,"1 the manner by which many public health students are educated pays scant attention to the principles and strategies embodied in the concepts of "doing collectively." Scrutiny of public health curricula often reveals disproportionate attention to conveying what is known about conditions by which people are healthy, at the expense of students experiencing what should be done to assure that necessary conditions are met. This article describes an approach to service learning at the University of Connecticut Master of Public Health (UConn MPH) Program in Farmington, Connecticut, that is designed to cultivate student interest in applied practice, contribute important and otherwise unavailable resources to the public health system, and foster enduring campus-community partnerships for health. While service learning is not a new concept in public health education, this article should serve both as a primer to those new to the concept and as a review to those already invested in service-learning activities.

Service learning—a framework linking content and performance standards within focused, collaborative, and reflective activities—is both a purposeful and humanizing experience. In the process of bringing individuals together to undertake public health action, students, advisers, and community partners not only produce tangible effects within their communities (e.g., fulfilling otherwise unmet needs or preparing a competent workforce), but also gain experiences that affirm shared values supporting civic engagement, common welfare, and social progress. Successful service learning goes beyond the sharing of information among students and practitioners (what Himmelman describes as "networking"2) to the sharing of experiences (i.e., collaboration). Education through experiences-sometimes referred to as "learning in deed"3—affords students insight into the rationale for and consequences of public health practice. Equally important, service learning develops within individuals "capacities and interests in ways that empower [the learner] to assume the role of constructive participant in the life of the wider society." As Dewey explained, "Shared experience is the greatest of human goods. ... The things in civilization we most prize are not of ourselves, but exist on the contrary by grace of the doings and sufferings of the continuous human community in which we are a link."4 As the investments of time, assets, trust, and expectations in relationships grow, so does the capacity of students and preceptors alike to be effective and just agents for change.

The knowledge needed to significantly reduce

health burdens of society is available already. The effectiveness of many interventions that prevent and/or inhibit cancer, heart and vascular diseases, injury, mental illness, and communicable disease is established.⁵ Likewise, the benefits of certain health systems' changes and community-based prevention programs to limit disease, disability, and premature death rates among populations have been scrutinized and affirmed.⁶

Occasions for students to act on the basis of accumulated knowledge in collaborative campus-community partnerships that acknowledge a shared responsibility and common purpose should be expanded and evaluated for evidence of effectiveness in preparing individuals to deliver proven public health practices to at-risk people and populations. Relevant opportunities include efforts to disseminate methodological tools and strategies for effective community health action, to encourage campus-community partnerships to address health threats, to advocate for policy implementation, and to engage in program evaluation. Through such practice-based activities, students, faculty, and community partners will validate knowledge acquired through the curriculum, signal information gaps in need of further study, and expand the social capital available within our communities.

A BRIEF HISTORY OF PUBLIC HEALTH EDUCATION AT UCONN

Graduate education in public health began at UConn in 1976 and earned accreditation from the Council on Education for Public Health (CEPH) in 1984. UConn offers an integrated theory-practice curriculum designed for working professionals that requires completion of 10 graduate courses (30 credits), including one for each of the public health core disciplines, public health law, research methods, and three electives addressing core functions of public health; an additional two to four electives (six to nine credits) in a student's substantive area of interest; a practicum (three credits); and a capstone project (three credits for an applied practice project or nine credits for a thesis). Dual degree options are available to students enrolled in UConn schools of Medicine (doctor of medicine/MPH), Dental Medicine (doctor of dental medicine/MPH), Social Work (master of social work/ MPH), Law (juris doctor/MPH), and Nursing (master of science in nursing/MPH). Since the program's inception, more than 600 MPH degrees have been conferred.

Consistent with CEPH guidance that "a planned, supervised, and evaluated practice experience is an essential component of a public health professional degree program," UConn's MPH faculty came together in 2003 to revise degree requirements along four complementary lines of thought:

- 1. Courses were configured so that all students complete a common core course sequence for the purpose of building group identity and encouraging collaboration and social relationships within their entering cohorts.
- Independent service-learning opportunities were developed through formal memoranda of agreement and other partnership agreements between the MPH program and state and local departments of public health, hospital and other health-care systems, and voluntary health-service agencies.
- 3. The program's capstone requirement was modified to permit students to undertake an individualized applied practice project in completing the MPH degree.
- 4. Every entering class cohort is assigned an organizing theme around which speakers, seminars, and the semester-long group practicum experience are coordinated.
- 5. By graduation, all students should have amassed a performance portfolio reflecting several experiential and service-learning activities.

We believe that together, these requirements will prepare students for and encourage commitment to careers in public health practice.

THE SECOND-YEAR GROUP PRACTICUM EXPERIENCE

From their earliest days in the program, students are made aware of the practicum project and the specific tasks expected of them. Convocation speakers are selected to address the upcoming practicum topic, and faculty members are encouraged to utilize readings and assignments drawn from the relevant literature within the core curriculum. At the end of first-year students' spring term, second-year students present a preliminary report of practicum project activities and findings to the first-year students. It is on that occasion that first-year students learn of the practicum project theme that will guide their efforts during the second year of study.

Practicum themes are selected by the program director, in discussion with relevant program committees, in response to perceived public health concerns within the state. Other factors taken into account include the range of experiential opportunities for individual students and the capacity and interests within the

community to work with students on particular topics. Consideration also is given to selecting topics that bridge, rather than overlap, student backgrounds and interests, in an effort to move all individuals beyond their comfort zones and reduce knowledge/performance disparities among students. It was reasoned that to do so increases the potential for all students to engage in and benefit from peer instruction. Moreover, forcing attention to a "relevant but lesser examined topic" would offer students a yardstick against which to measure their progress toward becoming a public health practitioner.

Our group practicum experience is organized around principles that public health practice is the following:

- Orderly—effective intervention depends upon sequential assessment, asset mapping, planning, programming, and evaluation.
- Cumulative—a semester-long course necessarily is built upon, and contributes to, efforts across the curriculum.
- Interdisciplinary—the connection of personal health issues to broader public problems defines and justifies intervention.
- Collaborative—rights and responsibility among agencies, practitioners, and schools must be shared for sustained effort.

Students are asked three general questions:

- 1. What burdens/challenges does the selected topic pose for Connecticut's health?
- 2. What is the current capacity of practitioners, programs, and services in Connecticut to address an issue?
- 3. Can additional regulatory and policy strategies be put forth to ameliorate current conditions?

The learning strategies imbedded in the group practicum project include self-directed learning, peer instruction, and reflective self-assessment. Its educational objectives seek the following proficiencies:

- Defining biological, social, cultural, economic, and behavioral determinants of problems being studied
- Identifying individual and community resources available to address conditions
- Recognizing performance of assessment, assurance, and policy development functions by public health agencies
- Engaging community-based practitioners and other stakeholders in public health action

- Outlining a comprehensive public health prevention framework
- Demonstrating organizational skills in coordinating disparate activities of students within and across workgroups
- Demonstrating written and oral communication skills

Group practicum eligibility

Students are encouraged, but not required, to complete the group practicum project. Approximately one-half of matriculating students, by virtue of special public health interests, professional aspirations (e.g., interdisciplinary degrees, medical residents, and fellows), or constraints of time and/or availability, complete a conventional individual practicum that runs concurrently during their second academic year with the group project. Students opting for the individual practicum identify a field preceptor with whom they work to define a special project's scope and deliverables. All other aspects of the practicum experience detailed subsequently in this article are shared in common by students, regardless of whether they complete the individual or group project.

Group project logistics

Students meet as a group with the course directors for two weeks at the start of the semester and periodically thereafter for a total of six in-class sessions. Class sessions provide occasions to set course requirements, introduce students to course staff and field preceptors, and engage students in discussion of recommended readings. Students use the time to define project objectives and update one another about pertinent issues and accomplishments related to the project. During these initial weeks, students work to specify a logic model⁸ that guides subsequent activities and gauges group performance. The logic model offers a blueprint for semester activities and may only suggest the connection between project activities and any longterm impact (e.g., reducing childhood obesity levels). Figure 1 illustrates the logic model that guided work on the 2005 group project, "Halting Childhood Obesity in Connecticut."

From among a number of suggested courses of action, students begin the semester by distributing roles and preparing learning contracts⁹ that specify activities to be undertaken and products to be delivered during the semester. Figure 2 illustrates a typical learning

Figure 1. Logic model used for analysis of 2005 group practicum project, "Halting Childhood Obesity in Connecticut"

Assumptions	Resources	Immediate activities	Intermediate outputs	Long-term impact
 Society has an interest in the behavior and well-being of its members. There are known social determinants of overweight and obesity among children. Physical inactivity and dietary excess contribute to childhood obesity. Overweight and obesity predispose people to ill health and poor quality of life. Surveillance and service data are incomplete. Consistent messages and information are lacking. Sustainable change in public health response to childhood obesity levels can be achieved within five years. Sustainable change in childhood obesity levels can be achieved within 10 years. Multifaceted solutions to the problem are required. 	 Stakeholders within communities Secondary data Bibliographies Action plans for schools, healthcare facilities, government advocates, fitness industry, academia, and communities Primary data from public health agencies 	 Review statistics and program information. Access data from local health departments. Inventory programs and services. Initiate observational studies of childhood behavior. Review legislative and policy options. Draft summary report with recommendations. Call stakeholders together for a meeting. Address state legislature at public hearing. 	 Greater awareness of University of Connecticut Master of Public Health Program Purposeful action by public health practitioners and community stakeholders to remedy childhood obesity in Connecticut 	Reduce the proportion of Connecticut's children and adolescents who are obese or overweight to 5%.

University of Connecticut Master of Public Health Program Practicum Learning Contract

This document is to be signed by the student, preceptor, and course director.

Student name: Jane Doe

Field practice site: Central Connecticut Health District

5050 Silas Deane Highway, Wethersfield, CT 06109

Field preceptor: Paul Hutcheon, MPH, Director of Health

Field work topic(s): Evaluate current methodologies for deriving estimates of disability prevalence for local communities;

develop a community health survey tool for local health directors.

Estimated hours/week: Eight

Skills to be applied: Evaluation of current methods, survey item development, survey design, survey pilot-testing, data

gathering and analysis, professional-level community interaction, population sampling

Method and timetable: I will first evaluate current methodologies involved in estimating the prevalence of people living with

disabilities in Connecticut communities and determine what elements might be employed to better capture information on the prevalence of disability in those settings. I will accomplish this by involving various town advisory committees in a discussion of how data have been collected in the past, what the goals of previous data collection have been, and what the needs of the community are. Based on these discussions and evaluations, I will develop a survey with the goal of estimating the prevalence of disability

in the communities, which will be used to compare to already established prevalence estimates.

Final product for delivery: A survey instrument to the Central Health District and one or more municipal advisory committees on

disabilities.

Student's Signature

Preceptor's Signature

Course Director's Signature

University of Connecticut Master of Public Health Program Weekly Activity Log

Reporting period: 2/05–2/11

Total time for the week: Approximately five hours

What I did: Met with my workgroup and discussed approaches to defining disability. Determined that at the very

least, the definition should be the same for our group as well as the group addressing the disability health. Determined who would contact which local Health Director precepting the project. Continued with

assigned reading.

Emailed my preceptor at CCT DPH to inquire about their definition of disability and how they gather/ analyze disability data. Researched Medicaid's definition of disability. Got in touch with a community health practitioner at CCT DPH to work on survey design. Although the group has identified three potentially useful surveys previously used to measure disability for the nation, we still have a gap in what types of questions will work best in the two to three local communities the group decides to survey. Pulled together survey questions that may be useful. We decided we should go to our preceptors with a draft

survey to discuss with them.

Recommended next step: Discuss with preceptors how they survey their community and what tools may be useful in implementing a

survey in their district. Go over the draft survey with preceptor to refine our methodology.

 $\mathsf{MPH} = \mathsf{master} \; \mathsf{of} \; \mathsf{public} \; \mathsf{health}$

CCT DPH = Central Connecticut Department of Public Health

contract that was developed by a student during the 2007 project, "The Challenges of Living with Disabilities in Connecticut."

During weeks with no scheduled class sessions, workgroups come together to coordinate activities related to their topics. Topics addressed during the 2007 group project included:

- The meaning of disability—an exploration through interviews and observations of individuals, caregivers, and disability advocates of how people living with disabilities perceive, expect, and experience the sociocultural context of an able-bodied world
- The definition of disability—a compilation of federal and state regulatory standards governing the eligibility of individuals with disabilities for government services
- Disability health—deriving statewide and municipal estimates of the prevalence of risky behaviors (e.g., smoking, inactivity, and inadequate utilization of disease-screening modalities) and illness states for people living with disabilities in Connecticut
- Community tool kits—a review and recommendation of best practices for assuring proper accommodation of people with disabilities regarding transit and transportation, lifestyle for social inclusion, compliance with built-environment standards, and community infrastructure
- Community assessment tools—designing a survey instrument and methodology, based on review and recommendation of best practices, for the community to assess the prevalence of disabling conditions among residents

Student performance

To facilitate communication among students, reduce redundancy, document activities, and offer a normative standard for expected performance, students are required to submit weekly activity logs (Figure 2) to the course directors that detail what was undertaken, who was contacted, how much time was committed, and what was accomplished. Using Blackboard Learning System[™], a learning management software system, ¹⁰ all class members have access to project information along with course/program announcements. Public posting of activity logs on Blackboard also serves to establish normative standards of workload and time commitments among some students who might otherwise operate as "free riders" on the efforts of others. The strategy generates real-time data on performance, effort, and results for the course director and others to routinely review and provide commentary. On occasion during the semester, individual students may be contacted and prompted to commit appropriate time/effort to the project, or the entire class may be recognized for the level of effort or consequence exhibited at a particular point in the semester.

Reflective experiences

To monitor intellectual and interpersonal growth of students as a consequence of their group activities, the course director routinely contacts individuals confidentially to gain their reflections on their experiences as group members and emerging public health practitioners. Examples of student reflections from the 2006 group project, "Improving Health Literacy in Connecticut," are presented in Figure 3. Typically, the course director responds to these reflections with encouraging and/or advisory feedback, but these responses also have been useful in allaying fears/concerns or adjudicating disputes/disruptions among group participants.

Dissemination of practicum activities

With the number of participants (25+ students), range of activities, and reporting requirements, the products generated within the course are considerable in size and complexity. To distill salient points for public distribution and to provide students an opportunity to develop their oral, written, and visual communication skills, the program offers a summer seminar wherein a smaller student group (three to five individuals) develops a print summary of project results and a computer presentation. The project summary and other supplemental materials are distributed to community stakeholders, government officials, and university leaders during UConn's annual November hearing at the state legislative office.

Depending on the topic of discussion, a leading member of the legislature is asked to sponsor the session and offer introductory remarks. Members of both legislative houses, the executive branch, and agency heads are provided invitations to attend and given printed copies of all project summaries. The session, approximately 75 to 90 minutes in length, consists of a brief introduction by the MPH program director regarding the program and the specific project, and commentary on the report by the sponsoring member of the legislature. The sponsor of the 2007–2008 presentation, Senator Jonathan Harris, chair of the legislature's Human Services Committee, addressed students about the relevance of the topic and the importance of their participating in policy development and program analysis. For the remainder of the session, student speakers summarize project findings and address audience responses.

The hearings have been well attended by the legislators, community representatives, interest-group

advocates, and media outlets. The sessions have been recorded by the state's Public Broadcasting Service network and periodically rebroadcast.

Figure 3. Reflection questions and examples of student responses from the 2006 group practicum project, "Improving Health Literacy in Connecticut"

Reflection question

Student response

This project requires you to develop a research focus with limited supervision from faculty. Do you feel prepared to undertake such responsibilities at this time?

Are you concerned about your skill or experience to complete the work?

Working as a group has its advantages and its drawbacks. How well is your workgroup working together?

Do you have any specific concerns about your group?

How responsible (accountable) do you feel about the work you've undertaken and the products you are producing?

Has the practicum reinforced the public health skills you brought into this course?

How has this course added to your skills?

By nature I prefer to have structure and supervision, and so I am slightly uncomfortable with the practicum. However, I believe that once I meet with my contact in the community, I will better understand my role and be able to proceed in a specific direction. Another concern I have is the self-government of the class as well as the prospect of having to coordinate not only with my subgroup, but with the class as a whole. I realize that this is real life, though, that I'll always have to work with people and come to a mutual decision.

At first, the task of developing a project seemed overwhelming; however, after reading the literature, I have a better understanding of the topic. There will be some stumbling blocks along the way; however, I'm confident my workgroup and I can figure it out.

Our group has a self-appointed leader who is not always open to discussion or suggestions. The other two members of the group are pretty strong, though, too, so I think we are hitting a balance over time. We are certainly all pulling our weight and, after listening to some of the discussion last Monday in class, we seem to be working more closely together than other groups.

I think my group is working very well together. We communicate via email, usually daily at least one on one, not always as a group. And we have been very diligent about meeting every Monday night during the time allotted for class. The only specific concern I have is about coming to a consensus decision. I think there are times that someone in the group wants to focus on something specific to them; it might not be in the best interest for the group. And I get concerned that when we try to verbalize it, it comes off as trying to take charge.

As our work will eventually be presented to the public with potential to affect change in the community, the information we generate and report on must be accurate. I hold myself to that standard. If the research on my part is inaccurate or my report is not supported by valid references, I am responsible for any resulting compromise of the course objective. I would likewise feel responsible for any related societal consequences that should follow our presentation of research to the public as a tool for making or changing public policy and/or practice.

I feel a strong sense of responsibility to my research. Considering the fact that I have spent a great deal of time conducting research on the topic of health literacy and I am part of a larger group, I feel very accountable for the information that I report. The report is representative of myself, my group, and the whole class. I recognize that the information that I provide could ultimately have a positive impact on the way that many people receive health information in the state. Hence, I am committed to presenting accurate, articulate, and useful findings.

I think the practicum added to my skills by requiring me to think, make do, and solve a problem without much instruction or guidelines. I also enjoyed having a hands-on public health opportunity with the field experience, working with a health district.

I see . . . communication, information gathering, and working productively with others as being critical to the field of public health. The practicum has given me valuable practice with each.

This course has helped me put into practice some of the theories of health promotion and health communication that I have read about. It has also helped me add more patience to my public health skills because it showed me that things do not work in an orderly, organized, and timely manner all the time.

It is clear that one needs to learn the fundamentals before going into the field, so the experiential spring practicum is a valuable component of the MPH program. The practicum has certainly strengthened my skills by providing me the opportunity to test my knowledge as well as learn from my frustration.

Project impact

Because the group practicum has been offered only three times so far, its impact on our curriculum and the local public health environment is still emerging. Within the core curriculum, greater attention has been given to linking reading and other related learning materials to the practicum topic for a given year. Throughout their enrollment in the program, students increasingly identify their entry cohort by their practicum topic, and anecdotal remarks from faculty suggest more frequent and extended group study and collaboration among students who have participated in the group practicum than in prior years.

Course evaluations compiled from the three consecutive group projects indicated that 33% of enrolled students judged the practicum project's educational value to be "very high," with an additional 35% judging it as "high." Comments included, "... the course was invaluable. I have been able to successfully take the practicum information back to work to help start a Health Literacy initiative" and "It was monetarily frustrating! That's why it worked. Challenging. A great opportunity to explore your particular interest within PH. It lets you put your skills to the test. Keep it! Can I help run it next year?"

Criticisms/reservations typically pertained to course organization and requirements, such as the following: "I don't think the tracking of our work hours added to the experience and it created a sense of mistrust," "Drop the logic model idea," and "I would definitely recommend extending the length of the practicum to two semesters so there is more time to incorporate greater community work and follow through." There are not yet sufficient data to indicate whether students are shifting attention from thesis to applied practice projects for a capstone experience.

To date, all three practicum projects have had significant impact in the community. Our 2005 practicum group's report on childhood obesity was among several advocacy efforts that moved the state legislature to prohibit use of soda/snack vending machines in public schools. Our 2006 practicum group's report on health literacy led to the introduction (but not passage) of a bill asking for a statewide health literacy task force. Findings from the 2007 practicum group's report on disabilities are to be used, in part, by the state department of health for an issues brief on health disparities related to disabilities. Two students went on to complete capstone projects on childhood obesity; two others contributed poster presentations on health literacy to the Connecticut Public Health Association and an oral presentation to a Connecticut Health Writers Forum.

All three products have been preserved by the

UConn Health Center—L.M. Stowe Library's Digital Commons (Digital Commons@UConn), an electronic repository of the intellectual output of the UConn community.

CONCLUSION

The late comedian, Professor Irwin Cory, astutely cautioned, "If we don't change direction soon, we'll end up where we're going!" It is a mistake to assume that mastery of concepts and information on public health is sufficient for individuals to become effective practitioners. It is equally wrong to expect that the necessary capacity to undertake such action is innate in people who enter the public health field or that such capacity may be acquired inadvertently during one's course of study. Students deserve, and our discipline requires,1 deliberate, competency-based educational experiences in the "scholarship of application," 11 where individuals have the opportunity to bring what is gained through classroom study to bear upon pressing public health concerns.

UConn's practicum project offers students an introduction to public health practice and prepares them to undertake additional field training while completing degree requirements. Short-term results suggest that students are developing practice-oriented skills through this project and are expressing satisfaction with the growth they experience. Just as importantly, in bridging the need to know and the need to do, the group practicum experience at UConn makes students appreciate the benefit of collaborative problem-solving. The UConn group practicum experience has generated enthusiastic interest and participation among the state's public health practitioners, while offering a meaningful service-learning opportunity to students. Equally important, the students' efforts have resulted in tangible assessment, assurance, and policy-development tools for promoting the public health agenda in Connecticut.

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