

Students in the Community: MAPP as a Framework for Academic-Public Health Practice Linkages

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The importance of establishing and sustaining academic-public health practice linkages has been a point of emphasis in the Institute of Medicine reports on public health in 1988 and in 2003. One likely barrier to fostering such linkages is the absence of a clear framework that matches academic requirements to practice realities. This article describes how an academic-public health practice collaborative has used MAPP in a health planning course for Master of Public Health students over a 3-year period, allowing students the opportunity to work in communities with public health practitioners. The specific focus for each of these 3 years has varied, but underlying the work has been a consistent approach to teaching and working in communities with MAPP as the frame of reference. The outcome of this work has been of value to students and faculty, to public health department staff, and, most important, to the communities where this work has taken place. This suggests that there is great potential for using MAPP as a framework for establishing and strengthening academic-public health practice linkages.

KEY WORDS: health planning, linkages, MAPP

The Institute of Medicine (IOM)—both in its 1988 report and in the more recent 2003 report—has identified academic-public health practice linkages as a critical element for the future of public health.^{1,2} Opportunities to establish and sustain such linkages can be as varied as the academic programs and public health practice settings themselves. The absence of a clear, consistent framework for academic-public health practice linkages likely contributes to the gap between the classroom and the field. The focus of this current article is how we have used Mobilizing for Action through Planning and Partnerships (MAPP),³ with its healthcare planning tenets, as a framework for involving Master of Public

Health (MPH) students in public health practice in community settings. We also discuss, with examples, the immediate impact of this work on the following: public health practice—answering human resource needs; academia—students gaining firsthand knowledge of participatory data collection and analysis; and the communities—infusing energy and empowering.

● The Setting

The implementation of MAPP through academic coursework involved four groups: the East Tennessee Regional Health Office (Tennessee Department of Health); Local Health Councils; Local Emergency Planning Committees; and the University of Tennessee Master of Public Health Program.* A brief description of each will follow.

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*Linkages between academia and public health practice in East Tennessee have been on-going in various forms for several years. Two of us are directors in our respective fields—one (PCE) as director for the ETRHO, another (CH) as the director of the MPH program at UT. The third author (SW), a product of the dual MS-MPH academic program for public health nutritionists at UT is the strategic planning coordinator for the ETRHO. In addition to guest lecturing and leading seminars, these connections have allowed us to offer and supervise public health practice field placements for MPH students who have completed their coursework and are nearing graduation. Although these professional interactions and individual teaching-learning situations helped to strengthen academic-public health practice linkages, involving groups of students at an earlier point in their course of study did not emerge until 2002. The involvement of one of us (PCE) in the early development of MAPP created just such an opportunity.

The East Tennessee Regional Health Office (ETRHO) provides oversight and direction for public health activities and services in 15 mostly rural Appalachian counties surrounding Knoxville, Tennessee. The total catchment population is approximately 700,000 persons. County Health Departments in each of these counties provide an array of services, focusing primarily on disease prevention and health promotion services to women and children.

In the mid-1990s, the Community Development Division of ETRHO began facilitating a state-developed community health planning process.⁴ This process, called “Community Diagnosis,” led to the formation of local health councils (LHCs) in each of the 15 counties. Local Health Councils are typically volunteer community groups, composed of local citizens interested in and concerned about health and healthcare issues. Since their formation, LHCs have conducted community assessments to identify key health issues and health priorities for their communities. In subsequent years they have implemented a variety of projects, activities, and programs to address their priorities. By 2000, several LHCs were poised to undertake another cycle of community health planning, and regional support was offered to counties with interest in implementing MAPP.

Local Emergency Planning Committees (LEPCs) were mandated by Congress in 1986 with the initial task of developing an emergency plan that would prepare communities to respond to chemical emergencies.⁵ LEPCs are typically composed of representatives from local law enforcement, emergency medical services, local health system and public health, and volunteer organizations such as the American Red Cross. In Tennessee, the LEPC’s role in emergency planning has continued to grow with recent involvement in addressing smallpox mass immunization and other bioterrorism-related issues.

The University of Tennessee MPH degree program in Knoxville (UT/MPH) is nationally accredited by the Council on Education for Public Health. Integral to the professional practice degree, a field internship of 9 to 12 weeks is completed by most MPH students near the end of the program, typically on a full-time basis. In addition, selected graduate courses offer opportunities for experiential learning at practice sites. The health planning and administration concentration of study (one of four available) requires a four-credit-hour course entitled “Theories and Techniques in Health Planning,” incorporating an applied community project. The course is intended to expand skills and competencies of students to participate effectively in, and provide leadership for, community-based approaches to health planning and strategic planning initiatives by health organizations.

● Methods

The community project phase of the health planning course has been implemented over a period of three academic terms (2002–2004), and has included a plan for planning. Although the particular focus and activity was different each year (as will be described further in “Activities and Results”) the overall process across each year was similar. Preparation for effective project design and coordination has involved a series of discussions by the UT/MPH course instructor and ETRHO administrators in late fall each year to review community project possibilities, including community readiness, and to examine upcoming human resource needs of ETRHO. Guiding principles for defining the project and its expected outcomes were that the planning activities needed to be timely priorities for ETRHO and also manageable within the 15 weeks of semester time available.

Careful attention to context was viewed as essential to engage working graduate students in community projects located 45 to 75 minutes from campus. With the project weighted 33% of the final course grade, the importance of the applied experience was clarified and significant foundation-building time was invested. Three class periods (out of 15) were used to carefully stage a progressive orientation to course expectations, to MAPP, to project objectives, and to the community. During the remainder of the semester, informal progress reports were shared by the students at the beginning of each class session.

Recognizing the process orientation of planning, the frequent use of a team approach in public health practice,⁶ and the benefits of cooperative learning groups, the students were organized in teams of 3 to 4 members. Team assignment was based on extent of work experience, possession of clinical credentials, demographic characteristics, and other skills relevant to planning.

An overview of MAPP and the components of MAPP believed most relevant for guiding the project were reviewed. Dialogue and Appreciative Inquiry techniques for engaging the community were introduced and practiced within the classroom.^{7,8} To increase understanding of the community setting, early meetings were held in the community to observe similar planning activities or to participate in open dialogue with community members about planning expectations and their participatory roles.

● Activities and Results

The activities and results of the 3 years of student involvement are summarized in Table 1, and further described below.

TABLE 1 ● A summary of students in the community

Year	Focus, related to MAPP	Setting	Process/instruments(s) used	Qualitative-quantitative elements	Outputs
2002	Local health council evaluation as a segue to MAPP	Three local health councils	CDC's framework for program evaluation	Local program outputs; leading causes of morbidity and mortality	Brochure for describing health council accomplishments
2003	Use of dialogue in organizing for success to facilitate a prioritization process	Two local emergency planning committees	Dialogue; public health assessment for emergency preparedness (PHAEP)	Scoring of the PHAEP	Prioritization of needs
2004	Facilitating the Community Health Status Assessment (CHSA)	One local health council	CHSA list of core and extended indicators	Leading causes of morbidity and mortality	Completed assessment with baseline indicators in a community-friendly format

Spring 2002: Local health council evaluation

By Fall 2001, most LHCs were focused on implementing projects to address identified community health priorities, and the ETRHO was facing several challenges in transitioning to a new community planning process using MAPP. A key consideration in preparing to engage in MAPP was measuring and recognizing the previous and current successes of LHCs. A framework for evaluation had not been established at the outset of Community Diagnosis; therefore, any evaluation would have to be retrospective.

To create a nonthreatening approach, an unlikely pair—evaluation and celebration—was melded into a process to assist LHCs in measuring and reflecting on their accomplishments. The process was developed using the MAPP evaluation model, CDC's Framework for Program Evaluation.⁹ Seven students interacted with participants during a 5-hour LHC retreat convened to identify accomplishments and develop a plan to measure their significance. In additional retreats with two different LHCs, students took on active roles of providing county-specific data summaries, facilitating roundtable dialogues to identify LHC-related activities for possible inclusion in an evaluation process, and assisting the development of a written evaluation plan. Students then followed up with LHC members who were to gather appropriate data for evaluation. Following completion of the evaluation process, students drafted brochures to describe the LHC's accomplishments. These brochures were distributed at LHC meetings and open public meetings to celebrate accomplishments, leverage additional resources, and recruit new members.

Spring 2003: Local emergency preparedness prioritization

In 2000, LEPCs in East Tennessee conducted the Public Health Assessment for Emergency Preparedness to specifically address community emergency prepared-

ness needs.¹⁰ However, survey results were not available until late 2002. Prior to undertaking the next phase of the planning cycle, it was necessary to interpret and prioritize survey findings to identify key issues.

Two ETRHO staff* developed a process for engaging LEPCs in establishing priorities for local emergency preparedness. The process was based on core MAPP principles, and was framed around the 10 essential public health services. Both quantitative survey results and a qualitative facilitation technique (Dialogue) were incorporated in the process.

Ten students observed and interacted with participants in two LEPC retreats facilitated by ETRHO staff. Subsequent retreats were primarily facilitated by students, with ETRHO staff acting in preceptor roles. Reports were produced (by staff for the first two retreats and by students for the remaining three) and provided back to the LEPCs. Staff followed up with LEPCs by presenting the priorities and next steps developed at the retreats and offered additional assistance with planning.

Spring 2004: Monroe County community health status assessment

Monroe County was the first in the East Tennessee Region to undertake local implementation of the full MAPP process. The Monroe County Health Council (MCHC) took the lead in this effort after completing one iteration of the health planning cycle using Community Diagnosis. The MCHC began "organizing for success" (the first phase of MAPP) in the fall of 2003, and by spring of 2004 the Council was prepared to begin the assessment phases of MAPP, beginning with the Community Health Status Assessment (CHSA).

The MAPP committee of the MCHC identified and convened a group of community representatives

*As part of a year-long project as participants in the 2002/03 class of the Southeast Public Health Leadership Institute (SEPHLI).

appropriate to advise the CHSA process. After familiarizing this data taskforce with MAPP and the CHSA, the group identified a variety of data sources and provided contact information for gathering data within each of the CHSA categories. Twelve students worked in three teams, with each team assigned specific CHSA categories, to collect and compile the data into a report and provide a final data presentation to the community. Representatives from each student team met with the data taskforce three times over the course of the semester to obtain feedback and guidance for the assessment. During their final class period, students met with the MCHC and the data taskforce to present their final report. The resulting product was a document that generated thoughts and questions that will be used to conduct the more qualitative Community Themes and Strengths and Forces of Change assessments.

● Discussion

The impact on public health practice, of involving classes of MPH students in various phases of MAPP implementation may be observed on multiple levels. Involving students *and* faculty in the field has

- provided a partial response to human resource needs to accomplish the work at hand, thereby helping the ETRHO move forward with MAPP implementation;
- increased the rigor with which ETRHO facilitates health planning activities, particularly in applying epidemiological and biostatistical concepts in data gathering and analysis;
- influenced ETRHO to think more carefully about—and be much more deliberate and strategic in—the evaluation component of the health planning cycle;
- served as a recruiting opportunity for future public health practice workforce; and
- compelled more ETRHO staff to seek formal training in public health through enrolling in the MPH program while continuing full-time employment.

Similarly, this collaborative has had significant impact on academia, across the broad academic mandates of teaching, service, and research, as it

- provided MPH students an in-depth, although time-limited, opportunity to see firsthand how public health manifests itself in the community setting; students recognized the complexity of managing projects and the need for flexibility and adaptability to accommodate varying values and perspectives of participants and organizations, some with greater power bases than others;
- increased insights for students regarding public health infrastructure, and competencies needed

to perform at various levels within that infrastructure;

- demonstrated to students that public health practice was strengthened through developing partnerships within the local public health system and with individual members of the community;
- provided faculty and students a mechanism to contribute community-focused service of direct relevance to curricula; and
- provided faculty an opportunity to participate in teaching and learning activities outside the classroom, including opportunities to conduct and describe such work within a community-based research paradigm.

Finally, this work has had impact as well on the communities where the work took place, through LHCs and LEPCs. Student and faculty involvement has

- helped move community processes forward, by completing necessary human-resource-intensive tasks such as data gathering, compiling, and report writing;
- infused energy into community processes and stimulated sharing of differing perspectives with momentum, leading to recruitment of new member(s) by the LHC;
- provided community members with a sense of pride in their ability to offer graduate students a learning experience; and
- empowered community members to feel more ownership and leadership in addressing their health issues by the experience gained through guiding and teaching students.

● Future Implications

As a comprehensive strategic planning process, with multiple distinct assessment activities, MAPP can pose a challenge for implementation in communities because of the requisite human resources. According to our experiences and perspective, this complex planning system and the need for human resources to help guide the process make MAPP a potentially good fit for public health graduate curricula. While the phases within MAPP are interconnected, there may be opportunities for students to “get their arms around” a well-defined piece of MAPP, and, by participating, at least a partial answer to the human resource needs in implementing MAPP may be gained. Both students and community stand to benefit.

Students and community members alike learned that there are gaps in the availability of current, reliable local data, and that planning and assessment processes must be adaptable to what is realistically possible.

Through experiencing the difficulty of retrospective data collection, all groups gained an appreciation for the importance of incorporating evaluation components throughout the planning and implementation phases of the health improvement cycle.

Even for the MPH students who may choose career positions in the broader healthcare system rather than in public health practice, the learning exposure most likely created an awareness of, and greater sensitivity to, the community impacts resulting from their future work as health professionals. The concept of planning *with* people, not *for* them, to improve community health was demonstrated in a variety of ways. Students became more keenly aware that public health interventions were more likely to be sustained in the long term by the local community if community leaders and stakeholders had the opportunity from the beginning to shape the process, to participate, and to feel true ownership.

Using MAPP simultaneously in the classroom and the field creates not only multiple learning communities, but also provides important opportunities to refine the MAPP processes and phases themselves. MAPP, as a Web-based set of tools, was designed with the intent of building on experiences of users to add to, modify, revise, or further embellish the Web site, process, and tools—and vignettes from experiences such as those described in this article can be beneficial to the wider arena of MAPP users through being included in the Web site.

In further clarifying the educational needs of students who are aiming for a career in public health practice, MAPP serves as a robust model for addressing the question, “For the 21st century, what competencies and leadership skills must be developed by the public health practitioner to impact positively the health of the community?” MAPP may serve as an even larger, integrating framework for MPH coursework, enlarging the potential for more consistent and meaningful

academic-public health practice linkages throughout the country. Indeed, the community health planning cycle as a framework for community health curricula has been used in the international setting for teaching medical and nursing students.¹¹ Its potential to serve as a similar framework for public health graduate curricula—with MAPP as a specific health improvement process of focus—is great.

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