Improving Performance at the Local Level: Implementing a Public Health Learning Workforce Intervention

Frank J. Holtzhauer, Jane C. Nelson, William C. Myers, Stephen Margolis, and Kevin Klein

In an effort to continually improve performance of the essential public health services with community partners, the diverse public health workforce in a major metropolitan area engaged in an organizational learning process. Core public health organizational competencies, identified in a multi-year collaborative applied research initiative, provided the curricula content for the public health learning experience. All members (about 600) of the Columbus and Franklin County (Ohio) Health Departments participated in four one-half day small group, highly interactive modules conducted during a 2-year period. The purpose of this article is to describe the design and implementation of this workforce intervention, the lessons learned, and implications for developing organizational capacity and improved performance.

Key words: *core competencies, essential public health services, leadership/employee empowerment, life-long learning, organizational learning, performance improvement, systems thinking, workforce development*

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Background and Rationale

Most health departments employ a workforce with an array of general and specific skills to provide a variety of services. The larger the public health agency, the greater the resulting diversity of staff and services seen, often ranging from alcoholism counseling and treatment to zoonotic disease control. The vast majority of staff has no formal education in public health disciplines. Administrative, technical, and support staff may have even less public health training. This contributes to a public health workforce producing units of work in a relatively segregated manner, often compromising the overall impact that the agency can have on the health and quality of life of the community.

This article describes the design and implementation of an educational intervention targeted at the

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During the planning and implementation of the workforce development process described in this article, Dr. Holtzhauer served as an Assistant Health Commissioner with the Columbus Health Department.

combined workforce of two coordinating health departments in a large metropolitan area. The intervention was developed to enable more fully the strategic changes occurring in the larger health department and to optimize the collective contribution of both agencies in aligning public health assets with community resources and needs.*

Approach: The Public Health Learning Process

The setting

The Columbus (Ohio) Health Department serves a population of approximately 670,000 persons with a wide array of direct and population-based services. The Franklin County Board of Health covers the balance of the 1.1 million persons in the county. The departments decided to work together to create and maintain an effective public health workforce by instituting a public health learning process for all staff. The intervention was named Public Health Learning to indicate the crosscutting nature of the content and the inclusiveness of the process.

All staff needed exposure to concepts dealing with public health core functions and essential public health services. An emphasis was placed on communication, coordination, and collaboration across disciplines and programs and through all levels of the organization to support the agency's vision of *Making Columbus the Healthiest City in America* (Figure 1).

Communication, Coordination, and Collaboration *Within and Between* All Levels of the Public Health Agency

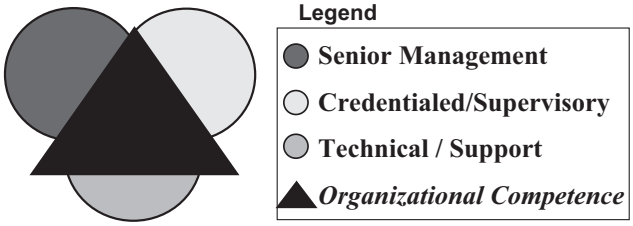

Figure 1. Requirements for organizational competence. Organizational competence requires communication, coordination, and collaboration within and between all levels of the public health agency. Performance can be optimized when expectations of performance are stated in terms of the essential public health services and defined by required organizational (or collective) competence. When expectations for organizational competence are stated clearly and reinforced as the norm, a public health culture is created for all members of the workforce—allowing the collection of disciplines, professions, skill bases, and programs that make up public health to have a greater impact on the public's health.

The planning phases

During the orientation of management and the planning committee, the team from the Center for Public Health Practice (CPHP) of the Rollins School of Public Health (RSPH) emphasized several important messages: the practice of public health is changing rapidly, thus, to remain relevant and effective, public health organizations need to become "learning organizations"[1,2] and the public health workforce needs to be flexible and open to change. All staff would benefit from a common understanding of the tradition and history of public health as well as the twenty-first century context in which public health will be practiced with community partners. The Public Health Learning Team, designed to be broadly representative of programs, functional levels, and workforce diversity, contributed many good recommendations during the planning process that were implemented as a part of the learning process (See the box titled, "Public Health Learning Team Recommendations.") In order to increase local public health capacity, a senior health education faculty person at the Ohio State University School of Public Health was employed in a half-time position at CHD and was engaged heavily in the learning team activities.

The authors wish to thank the employees who participated in the development and facilitation of the modules; all participating staff of the Columbus (CHD) and Franklin County (FCHD) Health Departments; and the boards of health for their support of this project. Special thanks to Susie Baker (CHD) and Mitzi Kline (FCHD) for excellent logistical support and interagency coordination.

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Public Health Learning Team Recommendations

- Survey all staff for their current perceptions related to concepts such as health, public health, community partners, and core public health functions to assist in tailoring the learning experience.
- Make the examples relevant to our community whenever possible.
- Evaluate each session and the overall learning module and make changes in future modules.
- Provide a certificate, suitable for framing, of individual completion of each module.
- Provide CEUs for credentialed staff through the RSPH.
- Engage a group of local staff as co-facilitators to assist the CPHP instructors in small group activities.
- Video tape several sessions of each module and the all staff gatherings for makeup and new employee orientation.
- Schedule learning experiences with the least disruption to routine health department services.
- Schedule in 4-hour blocks at different facilities (locations varied within modules and between modules, using health department, hospital, and other governmental or public facilities).

The RSPH team provided guidance and many options from which to choose. Based on the organizational competency areas identified with other practice partners in a multi-year applied research initiative, the learning process focused on the competency areas that serve an "enabling" function. (See the box titled, "Core Organizational Competencies Required for the Practice of Public Health.") These competency areas could be applied in three "customer" settings at all levels of the agency (Figure 2). In addition to the resulting four public health learning modules generated from the interactive planning process, pre- and post-public health learning sessions were held with all staff in supervisory roles to urge their understanding and cooperation with the process.

Implementation

The entire public health learning process was started with a major kick-off event attended by all staff of both the Columbus and Franklin county health departments. Additionally, local health department staff from contiguous counties, the state health department, The Ohio State University, and others were invited as guests. A number of elected and appointed local and state officials also were invited. The kick-off event was titled *Creating Our Future: Public Health in the Next Millennium.* All staff received a department logo lapel button with the words, *I'm Creating Our Future.* After opening remarks from both health commissioners, the CPHP faculty were introduced. Jonathan Peck, a futurist with the Institute for Alternative Futures, provided the keynote address. Doctors Stephanie Bailey and Paul Wiesner, Health Directors from Nashville-Davidson County, Tennessee, and DeKalb County, Georgia, then contrasted the changes that their health departments were undergoing to keep pace with the changing face of public health.

The following are brief descriptions of the four modules of the Public Health Learning process. For each module, participants received folders that included the module objectives, agenda, presentation materials, glossary or definitions, references and readings, and other materials that might be used to reinforce the concepts presented when applied in the work setting.

Module one—Public health in transition

This module contained three sub-units. The first section presented an overview of the history of public health and the benefits that have come from society's investment. A brief review of the factors that led to the "crisis" in public health in the 1970s and the 1980s provided the foundation for reviewing the Institute of Medicine's (IOM's) publication titled *The Future of Public Health*.[3] There was a renewed focus on core functions in public health. The final component of the module presented a new paradigm for public health, including: redefining "health" more broadly as community quality of life and in terms of its determinants; focusing on visionary leadership, systems thinking and partnering for ensuring the accomplishment of the public health mission. The module contained two interactive small group exercises, which assisted health department staff to envision the future of the city and the health department at 5, 25, and 50 years into the future.

Module two—Visionary leadership and employee empowerment

There was a half-day meeting held prior to the beginning of module two for all supervisors and man-

Core Organizational Competencies* Required for the Practice of Public Health

A comprehensive future-focused study identified 92 subcompetencies that are critical to public health in transition. These can be organized into seven organizational competency areas that have three general functions.

1. **Cluster One Function: To Inform**
   - **Communication (dynamic process grounded in respect for diverse voices):** Listens to others in unbiased manner; respects point of view or perspective of other persons; promotes the expression of diverse opinions and perceptions; speaks and writes clearly and in a manner appropriate to the message and the intended audience; utilizes technology to transmit and receive messages in a timely manner.
   - **Information Management (using technology to manage the transfer of information to end users):** Knows data collection process, technology transmission compatibility, and computer systems storage and retrieval capacities in order to access (and/or share) client treatment and case management plans, current health topics and updates, and community demographic and infrastructure information; provides information in user-friendly format in a timely manner.
   - **Assessment, Planning, and Evaluation (the continuous quality improvement cycle):** Identifies potential strategic issues through ongoing macroenvironmental scanning; identifies, collects, and interprets information regarding the health status of individuals or populations in order to formulate and prioritize goals and objectives for program services, to secure and allocate resources, as well as to provide feedback to improve activities and outcomes.
2. **Cluster Two Function: To Enable**
   - **Visionary Leadership (collaborative leadership to reach the shared vision):** Helps to define key values and uses these principles to guide action; participates in scanning the environment—internally and externally—for information critical to the agency's mission; keeps the mission in focus and articulates it clearly; facilitates creation of a vision of excellence, a compelling scenario of a preferred future; allows others to be empowered to create and implement plans to enact the shared vision.
   - **Systems Thinking (future-oriented problem solving and decision making):** Understands the need to see interrelationships rather than cause-effect chains; is proactive and manages the processes of change; promotes and facilitates organizational learning; is creative and flexible in identifying and evaluating alternatives and anticipates the consequences of actions and responses; optimizes opportunities to improve health status of community.
   - **Partnerships and Collaboration (optimizing performance through shared resources and accountability):** Manages and implements responsibilities by facilitating collaboration with groups (internal and external) to ensure participation and input from major stakeholders and constituencies; identifies multisector partners for potential coalitions or collaboration; promotes team learning.
3. **Cluster Three Function: To Perform**
   - **Promoting Health and Preventing Disease:** Obtains and interprets information regarding risk factors (both direct and contributing) for acute and chronic diseases, premature death, disability, and environmental health hazards to establish the determinants of community health status and factors that might be targeted for modification; promotes health broadly defined as quality of life in community; persuades and influences individuals and groups by increasing knowledge, shaping attitudes, and modifying behaviors towards disease prevention and intervention.

*Defined as knowledge, skills and abilities demonstrated by the organization through the collective contributions of its members that are critical to the effective and efficient function of the organization in performance of its mission.

Source: Nelson JC, Essien JK, Latoff JS, et al. Collaborative Competencies in the Public Health Agency: Defining Performance at the Organizational and Individual Employee Levels. Presented at PREVENTION 97, March 22, 1997, Atlanta, Georgia.

agers. The focus of the meeting was to discuss special concerns of this particular group and to expose the group to some important concepts of visionary leadership. Module two focused on assisting health department personnel to understand both the importance of and methods for becoming effective leaders in the various settings in which they work and live. The module also helped define how to facilitate the creation of a shared vision of excellence and of a preferred future for public health and the community as well as how to empower others and themselves to implement plans to accomplish the shared vision.[4,5]

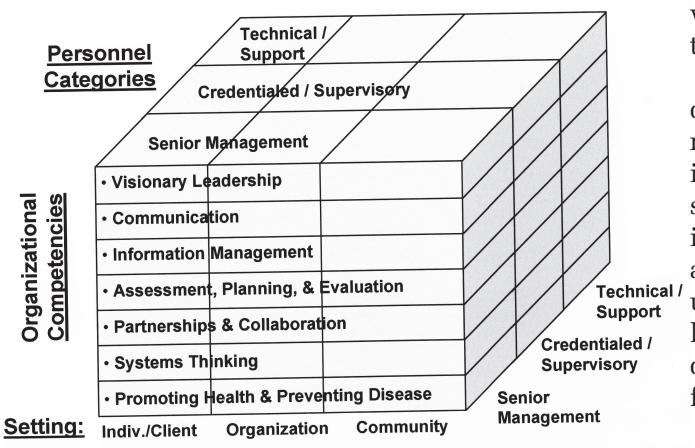

Figure 2. Organizational competence is multidimensional. In a multi-year, multi-phase applied research study reported previously, seven competency areas were identified. These competency areas were demonstrated in three customer settings: individual/client as "customer," the organization as "customer," and the community as "customer." Members at each level of the organization contribute to the collective demonstration of each competency area.

The module included interactive exercises to demonstrate the importance of visionary leadership and employee empowerment. Examples of activities and key concepts used in this Module are contained in the box titled, "Outline of Learning Activities for Module 2," and the box titled, "Key Concepts for Module 2, Visionary Leadership/Empowerment."

Module three —Systems thinking

Prior to the beginning of module three, a planning day was conducted with the original planning group and a number of other staff to select the activities for use in module three.

Module three began with another all-staff meeting. A number of examples of systems thinking were presented to the attendees by well-known local public personalities. The judge from the local environmental court, a member of city council, and the executive director of the alcohol and drug abuse and mental health board all spoke about the importance of working in systems to achieve desired outcomes. There were also a number of related fun and interactive activities interspersed throughout the meeting that involved all staff in the importance of working in systems.

Module three, Systems Thinking, was based on the concept that an effective public health workforce must be competent in future-oriented problem solving and decision making; that is, identifying the desired "end results" as well as anticipating and examining potential consequences of current strategy/action. The module was designed to assist all staff in understanding key concepts such as organizational learning and its facilitation as well as the need to focus on interrelationships as opposed to cause and effect problem solving.[1,2] (See the box titled, "Key Con-

Outline of Learning Activities for Module 2

From Visionary Leadership to Employee Empowerment

Learning questions

1. How do we know a leader when we see one?
2. How can each of us become a leader?
3. How can we provide opportunities for each of us to contribute to collaborative leadership?

The ABCs of LEADERSHIP

ASPIRATIONS: Our goals and values show us the way
BEHAVIOR: Do our words and actions reflect these goals and values?
CIRCUMSTANCES: Does the environment in which we live and work provide opportunity to participate in collaborative leadership experiences? How could this be improved? How could you contribute?

Small Group Activities

1. **Leadership:** Using the ABCs of Leadership, provide examples from your personal experience or knowledge of different types of leadership: What was the leader trying to accomplish? What did the person (or group or team) do or say? What were the circumstances that led to demonstration of leadership?
2. **Behavior and communication style**: How do I like to work? How do I get my message across to others? Do I understand the communication styles of others? What does each contribute?
3. **Circumstances and empowerment opportunity**: How can I stay informed? How can I participate in decision-making? How can I help "us" to make a difference?

Key Concepts for Module 2, Visionary Leadership/Empowerment

1. **Leadership—**doing the "right" thing, individually and collectively
2. **Management—**doing things "right"
3. **Collaborative leadership—**those charged with promoting and sustaining the collaborative process; includes the following principles:
   - inspire commitment and action around a shared vision
   - lead as peer problem solver
   - build broad-based involvement
   - model the way
   - enable others to act
   - sustain hope and participation: ***WE CAN DO THIS!***
4. **Empowerment—**a way of working together in the community, in the workplace, in the home; it is a process, something that happens in a relationship among people; points to remember:
   - **no one does it to you,** but others can guide the way and help you develop the tools that you need for the journey (accurate information, behavioral examples, encouragement)
   - it takes advantage of the human creativity and initiative that exists among people
   - it is built upon **TRUST,** which is reinforced by responsible action
5. **Health department—NOT** just a building, **NOT** just management; it is **EACH** of us working together to achieve public health goals
6. **Essential Public Health Services—**the framework consisting of ten ways to carry out the core functions of public health as presented in Module 1; this framework has been accepted as a guide for action, both as an individual agency and as a partner in community health improvement; for example, one of the essential services is

   Inform, educate, and empower people about health issues

   What does this mean?

   It means that we provide information, and we help people interpret this information in terms of choice and the consequences of these choices. People can then make informed choices—***decisions***—and assume/share responsibility for the consequences of any action taken.

cepts and Observations for Module 3: Systems Thinking.") Staff also dealt with how to proactively manage change and how to keep a "collective eye on the prize" towards improved health status in Columbus. Module three consisted of two sessions of 2 hours each with a 2- to 3-week interval between the sessions. This was done to increase the relevance of the content to participants through a "take-back assignment." An exercise was developed for individuals to "map" out his/her own "work system."[†] The first session introduced the concept of systems and the second session provided for the sharing of these systems maps. This exercise reinforced the concept of system (defined by CPHP) as *the dynamic interrelationship of components designed to enact a vision—whether at the level of the team, workgroup, program, agency, or community.*

Module four—New partnerships

This module focused on the definition and importance of stakeholders, including constituencies in need of services as well as community assets and resources, and presented methodologies for improving internal and external collaboration. This module also dealt with the importance of and the methods for identifying partners from a broad cross section of the community. Again, this module was designed to be an interactive learning process that tied together the three prior modules.

The timeline

The initial kick-off event and modules one and two were conducted during 1998, with module three in 1999 and module four presented in early 2000. The kick-off event and modules one and two were mandatory attendance for all staff while modules three and four were voluntary. The change from mandatory to voluntary attendance was precipitated by a very few staff who went into the process with negative attitudes, and in a few cases mildly disrupted the positive learning experience for the vast majority. The authors would recommend to others that all staff attend an initial offering on the history of public health and modern public health concepts and that the presentation be exciting enough to stimulate voluntary attendance at future learning modules. This provides the best learning atmosphere and creates curiosity among those staff uncertain as to whether it would be valuable to attend.

Key Concepts and Observations for Module 3: Systems Thinking

***"The real voyage of discovery consists not in seeking new lands, but in seeing with new eyes."*—Proust**

- **Learning Organization:** A learning organization provides an environment where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together.
- **System:** A system is a dynamic relationship of components designed to enact a vision; systems theory can be applied at the individual, workgroup, organizational, or social system level.
- **Systems Thinking** is
  1. the ability to think and act based on an understanding of how a system functions
  2. a way of examining the world by seeing interrelationships rather than linear cause-effect chains, and seeing processes of change rather than snapshots
- **Model**: A model is a representation of our vision of reality. It allows us to identify critical elements and the relationship between/among elements.
- **Mental Model**: A picture in the mind reflecting a belief of how things are or how things work within a system.
- **Ladder of Inference**: A visual representation (ladder) of how people form their mental models. Experience and data are the initial rungs of the ladder followed by meaning, assumptions, conclusions, mental models, and actions.
- **Leverage:** The points within a system that allow for the greatest change to occur over a specific period of time in relation to your goals and objectives.
- **Tension/Resolution:** A tension in a system will follow the path of least resistance to be resolved (i.e., limited resources leads to limited services or poor service quality).
- **Delays in a System:** When an action in a system unfolds slowly over time.

Evaluation

Evaluation of each session of each module was conducted and both the closed-ended and open-ended responses influenced the development of subsequent modules by the Public Health Learning Team. Both quantitative and qualitative summaries of this process would indicate a positive response to the public health learning initiative. It is difficult to establish outcomes that can be attributed directly to the intervention because of potential bias, both positive and negative, due to the other events in the environment and the turnover of personnel (full-time and part-time) at both health departments during the specified timeframe.

Because there is a commitment to the continuation of a public health learning process, the intervention may have established the organization's need for ongoing learning.‡ Some changes that have been linked to the intervention include the following: the reduction or removal of hierarchical barriers; decision making being "pushed" down in the organization; and more non-management staff and organized labor engaged in planning and policy advisory committee roles. The two health departments have developed a closer working relationship as evidenced by increased collaborative action and shared responsibility.§

Discussion

If the objective of the public health learning process is to increase organizational performance, then it is appropriate to bring diverse staff together to lay out organizational expectations as to how individuals can contribute to collective competence of the agency.

The format of each module was designed to present the crosscutting content of the competency areas within an interactive, participating experience. The expectation that the experience itself would create behavior change or a more competent workforce was and is unrealistic given the body of research on adult learning and changing adult behavior.[7,8] The modules provided a context for raising awareness, and a platform for discussion of changing expectations for how public health is to be practiced by health department staff. (There was no implication of individual competence versus incompetence, a sensitive issue among unionized public sector employees.)

This type of learning is more about "participants" as "teacher" and "teacher" as "facilitator," recognizing that the real learning will continue in day-to-day engagement and heightened awareness of expectations through modeling, coaching, and mentoring.

To really make the public health learning process a catalyst for change, selected competencies must be incorporated within a human resource performance management system that states new performance expectations in job descriptions and acknowledges this performance in its reward system.[6] It is also important to provide incentives to supervisors to use the learning to improve performance in the units or programs under their supervision and to look for ways to enhance collective performance across units and programs.[11]

Public health challenges are many, and the *Healthy People 2010* objectives lay out the nation's prevention agenda, including the public health infrastructure/capacity to support health improvement strategies.[9] The National Public Health Performance Standards Program provides a way to measure the performance of the local public health system (all those public/private entities that contribute to the essential public health services at state or community levels).[10] Both of these initiatives recognize the importance of the public health workforce and the critical need to strengthen this essential component of public health infrastructure.

With the current significant attention focused on workforce development issues, federal agencies such as the Centers for Disease Control and Prevention (CDC) and the Health Resources and Services Administration (HRSA) are working with academic and practice partners to develop strategies that address public health workforce educational and training needs and to determine the impact of training interventions on performance (see Lichtveld et al, this issue).

As we move toward quality improvement, accountability, and evidence-based practice through measuring performance against public health system benchmarks, we in fact may be creating a new public health culture to guide our actions in the twenty-first century. There are new expectations for the public health workforce, which may need explicit statement in terms of individual and collective contributions to creating and sustaining the organizational competence of the local public health governmental entity in terms of the essential public health services.

Each module was designed to send a message that this is important for "all of us" as learners in a learning organization. The interaction and information serve to promote behavior change, that is, if reinforced over time at a work unit or functional level. Stepping back from the experience, the public health learning process was more a way to set out "cultural expectations"—the attitudes, beliefs, knowledge, and behaviors expected of diverse learning organization members as they implement the public health mission.[11]

The probability for individual success in the practice of public health is linked strongly to the public health culture of the agency where the individual is employed. Because the culture of the agency is influenced heavily by the leadership of the agency, it is important for public health leaders to understand how to affect the culture[12] to achieve excellence in public health practice.

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ENDNOTES

*During 1995 and 1996, the Columbus Health Department (CHD), Ohio, developed a new vision and strategic plan designed to successfully move the CHD into the new millennium. Considerable time was spent on issues relating to the provision of direct and population-based services. The strategic planning process reinforced concerns that far too many employees were not prepared to see and function beyond their focused programmatic responsibilities. The CHD leadership believed that the more staff understood the general concepts of public health and their value and role in the delivery of local public health services, the better staff would and could support the CHD's new vision and strategic plan.

†The systems map exercise is available in *The Public Health Competency Handbook*.[6]

‡The CHD initiated another public health learning module in early 2001. This segment focused on raising the cultural competency of all staff.

§Examples of these collaborative efforts include the following: shared staffing, formation of joint committees, collaborative metropolitan area community assessment, collaboration on grant proposals, shared emergency response system, collaborative planning for the metropolitan area, and memorandum of understanding to share medical director coverage in emergencies.

||The CHD currently is reviewing key job functions and developing performance standards for all staff. This process is managed by the Office of Human Resources and the newly created Office of Public Health Standards.

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