

The Four Elements: ***Finding and Connecting the Missing Piece***

Prepared By the following:

Scholars

Heather Hampton

Administrator, Community Health Services Division, Louisville Metro Health Department
400 East Gray Street, #319
Louisville, Kentucky 40202
heather.hampton@loukymetro.org
502-574-8661 (phone) / 502-574-5650 (fax)

Melissa Morrison, M.A.

Cancer Control Specialist, Kentucky Cancer Program
2365 Harrodsburg Rd, Suite A230
Lexington KY 40504
melissam@kcp.uky.edu
859-219-0772 x253 (phone)

Vivian Rakestraw, R.N., M.S.N.

Supervisor of the Medical Component of the Teenage Parent Program
Jefferson County Schools
8800 Westport Road
Louisville, KY 40242
vluffle1@jefferson.k12.ky.us
502-485-8125

Connie Willis, B.S., R.S.

Coordinator, Environmental Health Services Division, Louisville Metro Health Department
400 East Gray Street, Second Floor
Louisville, Kentucky 40202
connie.willis@loukymetro.org
502-574-6641 (phone)

Mentors

Shawn Crabtree, M.S.S.W., M.P.A.

Executive Director, Lake Cumberland District Health Department
500 Bourne Avenue
Somerset, KY 42502
Shawnd.crabtree@ky.gov
606-678-4761 (phone)

J. David Dunn, Dr.Sc. in Hyg., M.P.H.

Professor of Public Health
Department of Public Health
Western Kentucky University
1 Big Red Way
Bowling Green, KY 42101
David.dunn@wku.edu
270-745-6395 (phone) / 270-202-2704 (cell)

EXECUTIVE SUMMARY

The U.S. population is aging and increasing in racial and ethnic diversity. Improving health for all populations in the U.S. is currently a major challenge for health departments. In order to overcome this challenge, public health needs qualified, educated and trained professionals. Currently health departments are finding it difficult to hire new professionals for expanding programs and replacing the increasing number of retiring staff. The purpose of this change master's project was to identify the reasons why public health departments are not able to satisfy their workforce needs and develop a mechanism to help supply the increasing demand for public health professionals.

The process began by surveying college students from UK, ECU and WKU to determine their knowledge of and interest in public health career opportunities. Concurrently health department directors or their delegates were surveyed to determine their methods of integrating and recruiting college students in their public health organizations. Based on information obtained from the surveys, it was decided that there is a need to develop methods to perpetually link college students and local health departments, therefore increasing student involvement in public health.

Student involvement as well as opportunities for involvement has increased over the course of the year-long project through several mechanisms. A student committee was created in the Kentucky Public Health Association, KPHA, to increase student involvement within the organization. After establishing bylaws and procedures for the committee, a \$4000.00 student scholarship was secured. Current KPHA student chapters were contacted and reinvigorated and student chapter interest was raised at three additional Kentucky colleges. A student involvement web page and chat room was created on the KPHA website, linking students to career opportunities, internship / co-op opportunities, local health departments, career fairs and other public health related programs. Templates for establishing new KPHA student chapters, marketing fliers, internship guidelines and sample agreements were also created and listed on the web page. All of this information was reproduced on CDs and deliverable folders to be distributed to health department directors and colleges to increase student involvement in public health.

During this process, many new partnerships were formed. The Kentucky Cabinet for Health Services, Personnel Office is presently partnering with local health departments and Kentucky Area Health Education Centers, AHEC, to staff Kentucky college career fairs and develop new internship opportunities. The Kentucky Association of Milk Food and Environmental Sanitarians, KAMFES, is beginning to partner with KPHA and Kentucky colleges to increase student activity in both professional public health organizations. Louisville Metro Health Department staff has linked with University of Louisville and Jefferson County Public Schools to create public health curriculum and participate in high school career fairs.

In conclusion, we hope that the links connected between students, colleges, public health departments and professional organizations will continue to increase student involvement in public health and subsequently fill current as well as future public health workforce needs. We also hope this project will serve as the foundation for future Change Master Projects and professional organizations to further the development of a quality, educated, public health work force.

INTRODUCTION

Public Health is an essential contributor to the overall health of our nation's population. It requires countless numbers of trained professionals to deliver the many important components that define public health (see appendix 1). Most of the individuals who are currently working in public health are "baby boomers" who are nearing the retirement age. The questions that this change master group, the Four Elements, looked at answering are: who will replace them, what are the local health departments doing to recruit and train upcoming public health professionals, what resource do students have to explore careers in public health and what are professional organizations related to public health doing to increase participation in this field?

The Four Elements decided to explore the reasons more college graduates are not choosing to enter public health careers and finding ways to raise awareness of opportunities in public health among students as well as to increase the utilization of students within the local health departments. Thus, **The Four Elements** came together for a common cause: to find and link the missing piece.

PROJECT DESCRIPTION

The project goal was to attempt **to lessen the gap between the supply and demand of qualified public health professionals by introducing college students to professional opportunities within the public health field.**

We wanted to find out why public health departments are not able to keep up with the demand for qualified workers. As a group, we believed part of the problem might be a lack of knowledge on both the students and health department directors' part. We developed two survey tools, one targeting current college students and one targeting local health department director-level personnel. We assessed the students' current knowledge of public health and the opportunities that public health affords them after they graduate (see appendix 2). The health department directors' survey (see appendix 3) addressed the methods they used to recruit qualified candidates needed to fill positions at their sites and how they utilized student interns, if at all. We were able to glean several common themes from the completed surveys that guided the rest of our work during this project through using the results of the surveys to develop methods of linking the future candidates and directors of health departments to each other as well as addressed the need for future public health service candidates to become linked to academic public health programs, professionals, and supporting organizations.

Those of us who work in public health are well aware that we will continue to encounter the problem of filling the gap in the supply and demand of qualified professions needed to fulfill the many roles in public health. We hope that this project will serve as the foundation for other Change Master Projects and public health professional organizations to build on.

PROBLEM STATEMENT

There exists a substantial gap in the supply and demand of qualified public health professionals; research indicates this is a gap that will continue to widen if not addressed.

- Retiring population of public health professionals
- Smaller cohort of qualified professionals arriving in the public health field
- Need for public health and thus public health professionals has changed so existing professionals are not necessarily qualified any longer
- Increased demand for public health services which increases the need for public health professionals
- Current pools of candidates have a lack of knowledge about or interest in public health careers. Public health professions offer less competitive salaries and benefits, making them less attractive to the upcoming professionals

OBJECTIVES

The project objectives were as follows:

1. Raise awareness of the public health field among students at Kentucky universities.
2. Link local health departments with state universities to assist in recruiting qualified individuals.
3. Increase student involvement in area professional organizations that participate in public health as well as in local health departments.

METHODOLOGY

The Four Elements identified and developed the following deliverables that we felt would meet the above listed objections as well as begin to link the pieces in the public health puzzle:

- Identify universities with Public Health or related degrees to advertise
- Identify state professional groups who are involved or work in a related Public Health field (KPHA, KAMFEST, LHD directors, KNA, KMA, etc.) and develop a list to ensure the information is communicated to students and/or future employees (see appendix 4)
- Develop an assessment tool to survey the current interest and knowledge of the Public Health field in the state universities to use as a baseline for measuring whether the activities completed by The Four Elements has an impact on the gap within the next two years (see appendix 2)
- Develop an assessment tool to survey the current utilization of students in the Public Health field throughout Kentucky to use as a baseline for measuring whether the activities completed by The Four Elements has an impact on the gap within the next two years (see appendix 3)
- Develop methods to assist universities and local health departments in marketing careers in public health and draw students to public health while they are students through internships, job shadowing, web page, fliers, etc
- Link health departments with Kentucky universities to participate in career fairs, offer internships, job shadowing, etc
- Provide universities that offer public health related programs information on how to start and increase membership in student organizations that will support their interest in public health careers such as starting a student chapter of the Kentucky Public Health Association

Finding and Connecting the Missing Piece
Increasing Student Involvement in Public Health

- Develop templates for creating student chapters of the Kentucky Public Health Association and internship examples, guidelines and agreements to provide on the website and to the Universities with student chapters of KPHA or who request them
- Recruit student organizations, professional groups, and future KPHLI scholars to continue this project. Specifically, we are interested in quantitative results and we would like to see follow up assessments of college students and directors in two years to determine if our project had a measurable and positive influence in closing the gap and to continue the use of the deliverables developed by the group

PUBLIC HEALTH SERVICES

1. ESSENTIAL PUBLIC HEALTH SERVICE

The Four Elements project; “Finding and Connecting the Missing Piece” specifically addresses the Essential Public Health Service #8, *Assuring a competent public health workforce* by working on linking current university students to local health departments through internships, co-ops and job shadowing. It also focuses on getting students involved in Professional Public Health Associations through student chapters of groups such as the Kentucky Public Health Association, having student representation on boards such as KAMFES and developing as well as promoting public health related scholarships.

Through these efforts, the Four Elements is also indirectly linking people to needed services, informing and educating people about public health and mobilizing community partnerships through the above listed activities.

2. HEALTHY PEOPLE 2010 GOAL

The Four Elements project underlines all the areas addressed in the *Healthy People 2010* report. If we do not have a competent and educated public health workforce, we will not be able to make any of the improvements in the specific categories outlined in the report.

The main area of the report that this project addresses is under Objective #23, Public Health Infrastructure, Workforce. It also touches on Objective 1, Access to Quality Health Services (how can you have quality services without quality professionals?) and objective 7, Educational and Community-Based Programs (specifically on training and education programs to address the public health workforce).

3. NATIONAL PUBLIC HEALTH PERFORMANCE STANDARD

The Four Element's project focuses specifically on addressing goals 1 and 3 of the National Public Health Performance Standards Program; provide performance standards for public health systems and promote continuous quality improvement of public health systems. These two areas are addressed through the Four Elements project in that the project focuses on developing performance standard mentality in the upcoming workforce and promoting continuous quality improvement of the public health workforce that will replace the current workforce. This early focus on training, standardization and quality improvement in upcoming professionals will stay with them once they come on board and take the place of the current workforce.

RESULTS

The Four Elements developed many deliverables to distribute around Kentucky through Universities, related public health organizations and local health departments. Following is a summary of those results (most of which can be obtained by from the KPHA website at <http://www.kpha-ky.org>); survey tool results, Kentucky Public Health Professional organization activities and high school activities.

1. Survey Instruments

Members of the Four Elements designed and implemented the baseline survey for students and health department directors in October and November of 2003. (See appendix 2 & 3).

- A. Student groups at Eastern Kentucky University, Western Kentucky University and the University of Louisville completed the student survey. A total of just over 200 students completed the survey, a third of which were in a freshman/sophomore oriented communication class (with few, if any public health oriented students), a third were in a basic science course for juniors, and a third were in a graduating nursing class.

The survey found that, as expected, most of the student respondents were unfamiliar with public health as a career opportunity, and most (80%+) would not consider working in public health after graduation. More than 75% of the students were under the impression that public health careers paid less than similar job opportunities. Interestingly however, most students (66%) said that they *would* consider an internship in public health, opening the door for them to learn more about the many benefits of a career in public health. Focusing on this willingness to participate in internships is key to increasing student involvement in public health.

- B. The health department director survey was sent to each local health department director for district and local health departments. Fifty-two surveys were returned to via e-mail or fax. Not surprisingly, we found that most directors, or their delegates, (90%) are advertising through local newspapers and through the State Health Department website. Many directors commented that they would welcome opportunities to expand their horizons in job marketing, and would appreciate information on opening their health departments to interns but do not currently do so as they do not have the time or know-how to create them. Some respondents did not believe that a student would want to complete an internship if it was unpaid and, therefore, did not try to recruit for this capacity as they have limited funds.

Based on a compilation of the results from the both surveys, the Four Elements proceeded on with objectives related to increasing student involvement in public health. Responses clearly showed that while many students would not currently consider careers in public health, they would consider internship opportunities relating to public health. Thus, increasing the number of internships available at local health departments, as well as increasing student awareness of opportunities, through increased involvement in professional associations related to public health, would help to capture student interest in these careers at an

Finding and Connecting the Missing Piece
Increasing Student Involvement in Public Health

earlier time, thereby increasing the educated public health workforce directly out of college.

2. **Kentucky Public Health Association Activities**

A large source of support, encouragement and assistance for The Four Elements and the project objectives came from the Kentucky Public Health Association including the following avenues for linking the pieces to the public health professional puzzle. Each of the Four Elements became a member of the organization for the first time during the course of the project.

- A. Student Committee – for the first time in the history of the Kentucky Public Health Association, a student committee was created to specifically target student involvement in public health throughout Kentucky. The Four Elements worked with KPHA board members to develop bi-laws for this committee and create tasks / objectives for the committee to work on.
- B. Scholarship – the first task that the committee and Four Elements tackled was the development of a student scholarship for students in Kentucky institutes of higher learning who are working on issues related to public health. The scholarship process and forms were created by the committee (see appendix 5 - 7), voted on and approved by the board and will be launched the 2004-2005 academic year. Funding, in the amount of \$4,000, was also secured, with an evaluation process to occur in two years.
- C. Web Page - The committee created a web page targeting students that will be hosted on the KPHA website (<http://www.kpha-ky.org>). The site features all the deliverables, information about career fairs, careers in public health and templates related to starting student chapters or internships with local health departments. The site also hosts a chat room.
- D. Student Chapters - Three Kentucky Universities currently have KPHA student chapters on their campuses, Western Kentucky University, Eastern Kentucky University and University of Kentucky. The committee contacted and re-energized the existing chapters and involved them in more program and deliverable creation processes. Work began to develop student chapters at other Kentucky institutions of higher education, three of which are in the process of developing chapters. They are Murray State, Pikeville DO and the University of Louisville. The committee wanted to make chapter development as easy as possible for students so sample bi-laws were created and posted on the website.
- E. Career Fairs – A link was forged with the Kentucky Cabinet for Health Services Personnel administrator and Local Health Departments to attend Kentucky college career fairs; providing information to student on public health career opportunities and the benefits of student involvement in public health professional organizations.

The committee is currently working with the Kentucky Association of Milk Food and Environmental Sanitarians to create a similar student committee in their organization to reach out to students interested in environmental health and protection as a career in public health.

Finding and Connecting the Missing Piece
Increasing Student Involvement in Public Health

3. Additional Work

- A. Association of Health Education Centers – a link was forged with the statewide AHEC. This link will serve as a way of advertising careers in public health, increasing student involvement in public health associations and working with them to develop student chapters on campuses in the areas that they operate. This is an invaluable link that will go a long way in increasing the interest of trained professionals in careers in public health.
- B. Health Career Program Tract - a link has been forged with the Board of Health in Jefferson County to create a public health tract to their existing Health Career Programs focus at the high school level. Currently in development are education units and presentations that can be given to classes as well as a series of job shadowing opportunities. It is the hope of the committee that once a program is established and tried in the Jefferson County school system, that it can be modified to other counties and used in their public school systems to raise awareness about careers in public health and institutes of higher learning throughout Kentucky who have programs for those careers.
- B. Greener Cities Committee – the committee partnered with the University of Louisville and The Jefferson County Public School System to develop a “Greener City” through an environmental health curriculum and providing student an exposure to public health careers. It is hoped that this curriculum, once developed and piloted in JCPS, will be modified and utilized in school systems throughout Kentucky.

CONCLUSIONS

It seems that, like many systems in a rural state, there is a lack of communication between potential employers and potential employees in the public health arena throughout Kentucky. With no particular part of the public health system being in charge of forging this ‘link’ between students and public health employers, the opportunity to link has fallen by the wayside for the most part. Our group, over the last year, has found that both potential employers, and potential employees are interested in learning more about each other, and we believe this change master project has taken major important steps in ensuring that those links are once again reinforced and will remain so in the future through continued efforts of professional public health organizations.

The KPHA student committee is now an integral part of KPHA as an organization, and health departments now are aware of career fairs, student chapters, and how to set up an internship, so they can be empowered to create their own system to increase student involvement, and thus, new employee interest in public health careers. Most certainly, over the years, this ‘link’ has the potential to be strengthened and expanded, perhaps by other KPHLI teams, or through KPHA, KAMFES and other professional public health associations. The important thing is that the ‘missing link’ has been identified and established, and opportunities now abound to expand on the relationships that have begun.

LEADERSHIP DEVELOPMENT OPPORTUNITIES

Heather Hampton

During the completion of the Four Element's change master's project, "*Finding and Connecting THE MISSING PIECE; Student Recruitment and involvement in Public Health careers*", I learned something new everyday. One of the most important things I learned was about all of the direct public health and related professional groups and associations that exist throughout Kentucky. I was able to network with professionals from a multitude of these organizations and get heavily involved in some of them such as the Kentucky Public Health Association.

I was also amazed to learn how lacking the involvement of students in Health Department's or related organizations and professional groups is. This is an oversight that will greatly impact the viability of these organizations and a strong public health workforce in the future. It is my hope that this project goes a long way toward bridging this gap and assisting in providing a qualified professional public health workforce in the future.

Overall the project taught me that true leadership is communicated through action. You can learn in many ways but you lead by modeling those behaviors and values that you espouse and would like to pass on to others. KPHLI assisted in my personal development in ways that I would not have expected at the beginning of the year. The readings, teachings and interaction with fellow scholars has enabled me to grow professionally and given me tools to impart some of my newly acquired skills on those around me.

Melissa Morrison

The last year has given me the opportunity to work with a wonderfully diverse group of leaders, brought together by a very special program. I have been surprised from the beginning at the thought and time that has gone into putting together this leadership institute, the course has most certainly been a challenge. Our change master project has opened my eyes to the broader scope of public health in our state, and the leadership and organizational experience I've gained in working with our group has been priceless.

Vivian Rakestraw

Participation in KPHLI has been a worthwhile professional and personal experience. Although I have held several leadership positions during my career, I have had little exposure to the skills that KPHLI has offered. The information presented, the presenters, and the methods used in dissemination have been, overall, energizing and useful. Meeting others with similar missions afforded me an opportunity to interact, consider, and broaden my perspective as I continue to work within the public health and school arena.

Our Change Master Project has been a challenge. I have enjoyed working with my team. Our project identified many issues that need to be addressed in order to recruit qualified and energized professionals needed to work in public health now and in the near future. I believe we were able to begin several processes that will make a difference. I wish to thank our outstanding mentors, Dr. Dunn and Shawn Crabtree, the many excellent presenters, and the staff of the KPHLI program, for their support, and encouragement.

Finding and Connecting the Missing Piece
Increasing Student Involvement in Public Health

Connie Willis

It has truly been an honor to participate in the Kentucky Public Health Leadership Institute. It has served as a reminder of why I chose a career in Public Health and the importance of how our actions can affect the health of our community. The Change Master Project of “Linking” students (potential employees) and health departments has only just begun, we are still in the initial phases and through KPHA, KAMFES and other outlets, I will, with others, continue the pursuit.

Upon leaving each summit (traveling home), I felt inspired, connected, energized and motivated to facilitate positive change within my organization. Working with my team, mentors and fellow scholars has been both enjoyable and rewarding. I realized Public Health has many incredibly dedicated and resilient advocates. The experience has given me a tremendous support system, new friends and many avenues to become a better Public Health Leader.

REFERENCES

1. Anderson, V. and Johnson, L. (1997). Systems Thinking Basics: From Concepts to Causal Loops. Waltham, MS: Pegasus Communications, Inc.
2. Committee for the Study of the Future of Public Health, Division of Health Care Services, Institute of Medicine. (1988). The Future of Public Health. Washington, DC: National Academy Press.
3. Gebbie, K., Rosenstock, R. and Hernandez, L.M. (Eds). (2003). Who Will Keep the Public Healthy?: Educating public health professionals of the 21st century. Washington, DC: National Academy of Sciences.
4. National Public Health Performance Standards Program. (2003). Guiding Collaborative Work to Strengthen Public Health Systems. (OMB # 0920-0555 & 0557). Atlanta, GA: Department for Health & Human Services, Centers for Disease Control and Prevention.
5. Rowitz, L. (2001). Public Health Leadership: Putting Principles into Practice. Gaithersburg, MD: An Aspen Publication.
6. Scutchfield, F. Douglas and Keck, William. (Eds). (2002). Principles of Public Health Practice (2nd ed.). Delmar Learning.
7. Senge, P., Kleiner, A., Roberts, C., Ross, R.B., and Smith, B. J. (1994). The Fifth Discipline Fieldbook: Strategies and tools for building a learning organization. New York, NY: Doubleday.
8. U.S. Department of Health and Human Services. (2000). Healthy People 2010: Understanding and improving health. (vol. 1 – 3). Washington, DC: Author.