Strategies for “FRAMING THE FUTURE” of your MPH Curriculum

Session Moderator: Donna Petersen, ScD, MPH, CPH
Presenters:
Rita DeBate, PhD, MPH, FAAHB, FAED
Jaime Corvin, PhD, MPH, CPH
Kate Wolfe-Quintero, PhD
Learning objectives:

• Describe the challenges and strategies for 21st century public health educational paradigm changes

• Describe the difference between competency-based and competency-informed curriculum and implications for assessing outcomes

• Identify frameworks and methods for translating “Framing the Future” recommendations into a 21st century public health curriculum

• Discuss methods and strategies for evaluating process of change and revisions via a pilot evaluation
Workshop Sessions:

• **Be the Change you Want to See in the World:**
  Preparing for 21st century public health paradigm changes

• **Know, Do, Be:**
  Translating 21st century public health content/skills into competencies

• **Create & Innovate:**
  Developing an innovative core curriculum

• **Ready, Set, Evaluate:**
  Piloting and revising your program of study
Session 1

Be the Change you Want to See in the World:
Preparing for 21st century public health paradigm changes
Why change?

• Variations in student mix
• Budget constraints locally and nationally
• Increasing complexity of faculty responsibilities
• Legislative expectations of accountability
• Employer expectations of skill and competence
• Technologic and pedagogic innovations
• Certification and accreditation
• Framing the Future, et al
How change?

- Iterative conversations
  - Data analysis and reporting
  - Listening, listening, listening
  - Town halls, coffees, workshops, social events

- Role play exercise
Meeting of the Faculty Assembly

• Proposal:
  • Eliminate the five traditional core courses
  • Replace it with one course, 12 credits over three semesters, team-taught
  • Designed to meet new realities of professional education in public health
Session 2:

• **Know, Do, Be:** Translating 21st century public health content/skills into competencies
KEY PRINCIPLES:

1. Aligns with key considerations, design features, and critical content from ASPPH Framing the Future report

2. Aligns with National Board of Public Health Examiners, Certified in Public Health (CPH) Exam Content Outline

3. Draws from ASPH Master’s Degree in Public Health Core Competency Model V2.3

4. Aligns with COPH and USF systems

5. Addresses student demographics and student needs

6. Draws from Experiential Learning curriculum design principles
CRITICAL CONTENT: ASPPH Framing the Future

- History and philosophy of public health as well as its core values, concepts, functions, and leadership roles
- Concepts, methods, and tools of public health data collection, analysis and interpretation, and the evidence-based reasoning and informatics approaches that are essential to public health practice
- Population health concepts, and the processes, approaches, and interventions that identify and address the major health-related needs and concerns of populations
- Identification and pursuit of opportunities for promoting health and preventing disease across the life span and for enhancing public health preparedness
- Biological, environmental, socio-economic, behavioral, cultural, and other factors that impact human health, influence the global and societal burden of disease, and contribute to health disparities
- The cultural context of public health issues and respectful engagement with people of different cultures and socioeconomic strata
- Principles of effective functioning within and across organizations and as members of interdisciplinary and interprofessional teams
- Concepts of project implementation and management, including planning, budgeting, human resources, assessment, and evaluation
- Characteristics and organizational structures of the U.S. health care system and how they compare to health care systems in other countries
- Legal, ethical, economic, and regulatory dimensions of health care and public health policy, the roles, influences, and responsibilities of the different agencies and branches of government, and approaches to developing, evaluating, and advocating for public health policies
- Public health-specific communication and social marketing, including technical and professional writing and the use of mass media and electronic technology
- Globalization and sustainable development and their relationship to population health.
National Board of Public Health Examiners, Certified in Public Health (CPH) Exam Content

- General Principles
- Biostatistics
- Health Policy and Management
- Environmental Health Sciences
- Epidemiology
- Social Behavioral Sciences
- Communication and Informatics
- Diversity and Culture
- Leadership
- Ethics and Professionalism
- Program Planning and Evaluation
- Public Health Biology
- Systems Thinking
Group Activity
<table>
<thead>
<tr>
<th>CORE COMPETENCIES</th>
<th>Curricular Content</th>
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<tbody>
<tr>
<td>Examine the history and philosophy of public health as well as its core values,</td>
<td>• Definitions of public health, health, population health</td>
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<td>concepts, functions, and leadership roles</td>
<td>• Sentinel events in public health</td>
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<td>• Core functions</td>
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<td>• Essential services</td>
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<td>• Public health agency accreditation</td>
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<td>• Core values, principles, tenets, frameworks</td>
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<td>• Leadership</td>
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<td>• Ethics and professionalism</td>
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<td>Compare and contrast characteristics and organizational structures of the U.S.</td>
<td>• Government responsibility for Public Health and the US</td>
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<td>health to health care systems in other countries</td>
<td>• Global Health Care Systems</td>
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<td>• Public health information infrastructure</td>
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<td>Describe Legal, ethical, economic, and regulatory dimensions of health care and</td>
<td>• The US Public Health System</td>
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<td>public health policy, the roles, influences, and responsibilities of the different</td>
<td>• US Health Policy</td>
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<td>agencies and branches of government, and approaches to developing, evaluating,</td>
<td>• Access, cost, and quality considerations</td>
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<td>and advocating for public health policies</td>
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<td>Topic</td>
<td>Courses</td>
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| Recognize biological, environmental, socio-economic, behavioral, cultural, and other factors that impact human health, influence the global and societal burden of disease, and contribute to health disparities across the lifespan | - Systems thinking  
- Theories, concepts, and models  
- Social and behavioral determinants  
- Public health biology  
- Environmental health (air quality, water quality, food quality and security, built environment, occupational health and safety, toxicology, infectious agents, global environmental health, solid and hazardous waste)  
- Diversity and culture |
| Describe Globalization and sustainable development and their relationship to population health | - Global Environmental Health |
| Examine population health concepts, and the processes, approaches, and interventions that identify and address the major health-related needs and concerns of populations across the lifespan and for enhancing public health preparedness | - Epidemiology  
- Intervention strategies  
- Risk assessment |
| Illustrate concepts, methods, and tools of public health data collection, analysis and interpretation, and the evidence-based reasoning and informatics approaches that are essential to public health practice | Epidemiology  
Biostatistics  
Informatics |
|---|---|
| Demonstrate principles of effective functioning within and across organizations and as members of interdisciplinary and inter-professional teams in addition to respectful engagement with people of different cultures and socioeconomic strata | Management  
Leadership |
| Apply concepts and principles of program planning, development, budgeting, management and evaluation in organizational and community initiatives | Program planning and evaluation  
Social Marketing  
Health Communications  
Management  
Leadership |
| Apply effective written and oral skills for communicating with different audiences in the context of professional public health activities | Literature review; plagiarism  
Policy memo and PPT presentation  
Create figures and tables using APA  
Concept paper for a public health program/intervention |
“This really is an innovative approach, but I’m afraid we can’t consider it. It’s never been done before.”
Session 3:

• *Create & Innovate:* Developing an innovative core curriculum
Creating a healthier world.

Steps in Concept Mapping

1. Prepare Project
   - focus
   - participants
   - schedule

2. Generate Ideas

3. Structure Ideas
   - sort
   - rate

4. Compute Maps
   - multidimensional scaling
   - cluster analysis

5. Interpret Maps

6. Utilize Maps

GROUP ACTIVITY
Creating a healthier world.

**History and Systems of Public Health (1-2c)**
- Core Competencies
  - Examine the history and philosophy of public health as well as its core values, concepts, functions, and leadership roles
  - Compare and contrast characteristics and organizational structures of the U.S. health care systems in other countries
  - Describe legal, ethical, economic, and regulatory dimensions of health care and public health policy, the roles, influences, and responsibilities of the different agencies and branches of government, and approaches to developing, evaluating, and advocating for public health policies
  - Apply effective written and oral skills for communicating with different audiences in the context of professional public health activities

**Population Assessment: Part 1 (4)**
- Core Competencies
  - Examine population health concepts, and the processes, approaches, and interventions that identify and address the major health-related needs and concerns of populations across the lifespan and for enhancing public health preparedness
  - Illustrate concepts, methods, and tools of public health data collection, analysis and interpretation, and the evidence-based reasoning and informatics approaches that are essential to public health practice
  - Describe legal, ethical, economic, and regulatory dimensions of health care and public health policy, the roles, influences, and responsibilities of the different agencies and branches of government, and approaches to developing, evaluating, and advocating for public health policies
  - Recognize biological, environmental, socio-economic, behavioral, cultural, and other factors that impact human health, influence the global and societal burden of disease, and contribute to health disparities across the lifespan
  - Describe globalization and sustainable development and their relationship to population health
  - Apply effective written and oral skills for communicating with different audiences in the context of professional public health activities

**Population Assessment: Part 2 (4)**
- Core Competencies
  - Same as Population Assessment: Part 1

**Translation to Practice (2-3c)**
- Core Competencies
  - Apply concepts and principles of program planning, development, budgeting, management and evaluation in organizational and community initiatives
  - Demonstrate principles of effective functioning within and across organizations and as members of interdisciplinary and inter-professional teams in addition to respectful engagement with people of different cultures and socioeconomic strata
  - Apply effective written and oral skills for communicating with different audiences in the context of professional public health activities

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Creating a healthier world.

History & Systems
Fall 1cr

Population Assessment 1
Fall 5cr

Population Assessment 2
Spring 3cr

Translation to Practice
Summer 3cr

Communications  Ethics  Leadership  Values Clarification
1. Experience
   the activity, perform, do it

2. Share
   the results, reactions, observations
   Describe the experience and / or reaction

3. Process
   by discussing, looking at experiences, reflecting

4. Generalize
   to connect the experience to real-world examples

5. Apply
   what was learned to a similar or different situation, practice

Develop how these skills can be implemented in other parts of their lives.

Do the activity before being told or shown how

Discuss what was important about what was experienced

Relate the experience and practiced life skills to everyday experiences.
Creating a healthier world.

The Flipped Classroom

DURING
Students practice applying key concepts with feedback

IN CLASS

GOAL

OUT OF CLASS

GOAL

BEFORE
Students prepare to participate in class activities

OUT OF CLASS

GOAL

AFTER
Students check their understanding and extend their learning

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<table>
<thead>
<tr>
<th>Instructor</th>
<th>Rita DeBate</th>
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<tbody>
<tr>
<td>ID Lead</td>
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<tr>
<td>Date</td>
<td>First Day of Class</td>
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<tr>
<td><strong>Module 1</strong></td>
<td><strong>Systems Thinking and Public Health</strong></td>
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<tr>
<td><strong>Lesson 1</strong></td>
<td><strong>Description</strong></td>
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<td>Part 1: Role of epidemiology in population assessment.</td>
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<td>Part 2: Socio-ecological model, life course model, Systems model, levels of prevention</td>
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<td>Part 3: Roles of biostatistics, socio-health science, health policy and management, environmental health and global health in population assessment.</td>
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<tr>
<td><strong>Learning objectives</strong></td>
<td>LO 1. Describe a systems framework (i.e., Risk Regulator Framework) that integrates the life course and socio-ecological model for assessing and addressing public health issues.</td>
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<td>LO 2. Examine the role of biological, behavioral, environmental (built, physical, and social), community, policy, and global factors in the onset of public health issues and prevention efforts through a systems framework</td>
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<td>LO 3. Examine determinants and feedback loops related to public health issues within and between levels of a systems framework</td>
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<td>LO 4. Examine the essential purpose and necessity for understanding and applying key principles and skills from epidemiology, biostatistics, socio-health sciences, environmental health, and global health when assessing public health issues from a systems framework.</td>
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<td>LO 5. Examine how a summary article on a selected disease relates to the systems framework.</td>
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<td><strong>TIME for Lesson</strong></td>
<td>3 hours</td>
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<td>Before Class</td>
<td>Activities</td>
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<td>1. Read the following text book chapters:</td>
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<td>o Epi: Chapter 1(pp 1-18)</td>
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<td>o Bio: Chapter 1 (pp. 1-4)</td>
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<td>o Behavior Theory: Chapter 2 (pp 41-66)</td>
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<td>2. Read the following articles:</td>
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<td>o An Educational and Ecological Approach</td>
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<td>o Determinants of Health</td>
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<td>o Childhood Origins of Adult Health: A Basis for Life-course health policy</td>
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<td>o Behavioral science a the crossroads in public health:</td>
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<td>Extending horizons, envisioning the future</td>
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<td>o Childhood obesity 2010: Progress and Challenges</td>
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<td>2. Watch the following video: TED Talk: What we learn before we’re born:</td>
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<td><a href="https://www.ted.com/talks/annie_murphy_paul_what_we_learn_befor">https://www.ted.com/talks/annie_murphy_paul_what_we_learn_befor</a> e_we_re_born</td>
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<td>During Class</td>
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<tr>
<th>After Class</th>
<th>Activities</th>
<th>Assessment</th>
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<tr>
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<td>Analysis of Systems Levels in Literature Review Articles</td>
<td>LO2, LO3, LO5</td>
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"This really is an innovative approach, but I'm afraid we can't consider it. It's never been done before."
Session 4:

- *Ready, Set, Evaluate*: Piloting and revising your program of study
Pilot Testing

- *Launched Fall 2014*
- 37 Students are participating in this pilot
- Performing above level
Process Evaluation

- **Students assess** each session, assignment and assessment.
  - Debriefing session
  - Formal Evaluation
Revisions

- *Driven by Key Stakeholder*
  - Students in the current core
- Guided by evaluation results
Creating a healthier world.

Lessons Learned
recognize mistakes
observe what works
document them
share them
Enrolling 2nd Cohort
Fall 2016
"My profession has probably been transformed again just since we started this session."
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