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

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KEEP CALM THERE'S A PARADIGM SHIFT GOING ON

Session 2:

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

"I'll start with the weekly progress report. Ms. London, on my right, will act as acronym and jargon translator."

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

CORE COMPETENCIES	Curricular Content
Examine the history and philosophy of public health as well as its core values, concepts, functions, and leadership roles	• Definitions of public health, health, population health • Sentinel events in public health • Core functions • Essential services • Public health agency accreditation • Core values, principles, tenets, frameworks • Leadership • Ethics and professionalism
Compare and contrast characteristics and organizational structures of the U.S. health to health care systems in other countries	• Government responsibility for Public Health and the US • Global Health Care Systems • Public health information infrastructure
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	• The US Public Health System • US Health Policy • Access, cost, and quality considerations

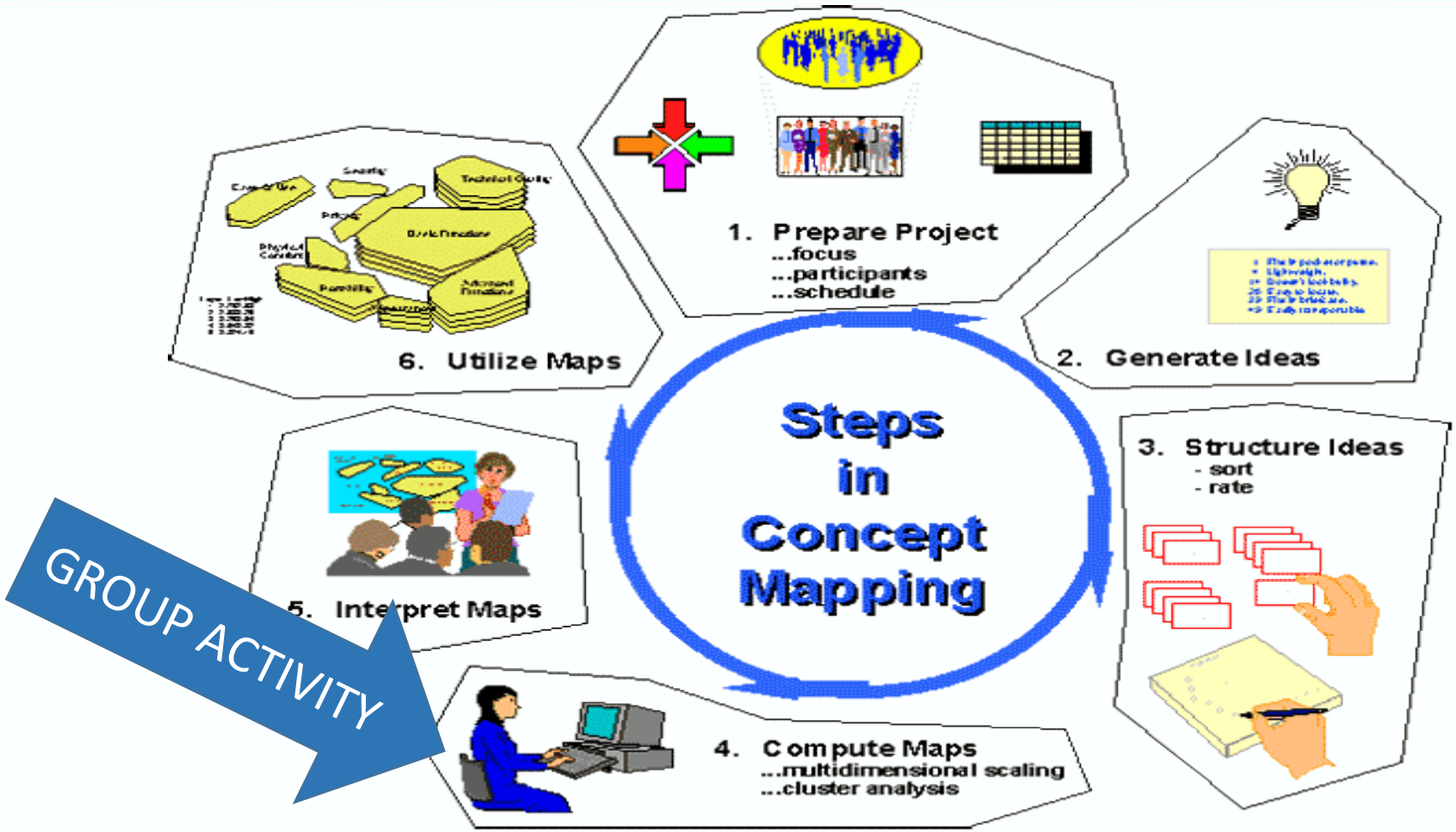
Recognize biological, environmental, socio-economic, behavioral, cultural, and other factors that impact human health, influence the global and societal burden of disease, and contribute to health disparities across the lifespan	• Systems thinking • Theories, concepts, and models • Social and behavioral 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


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
Steps in Concept Mapping
GROUP ACTIVITY

Creating a healthier world.

Semester 1

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 to 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

Semester 2

Population Assessment: Part 2 (4)

Core Competencies

- Same as Population Assessment: Part 1

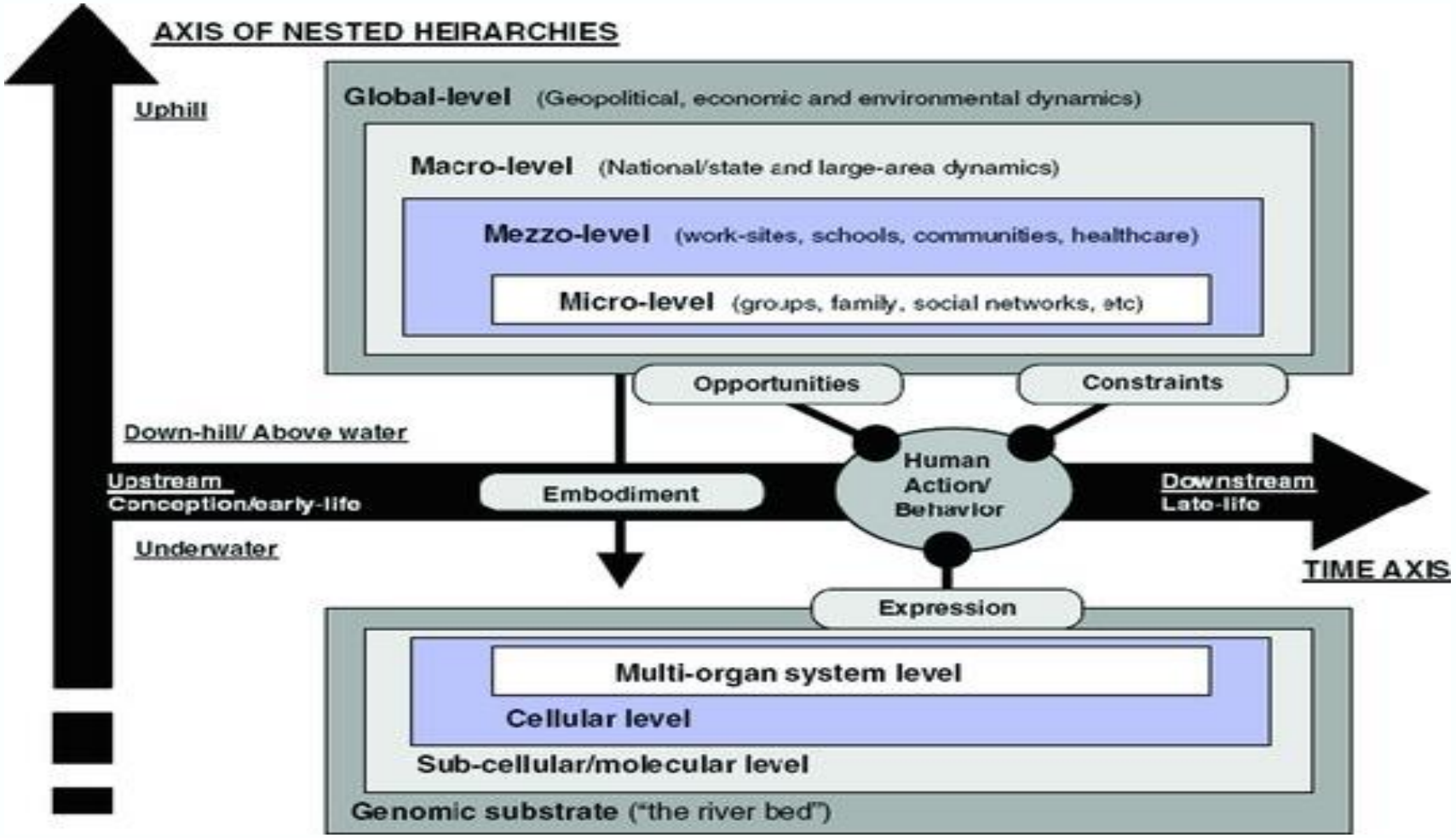
Semester 3

Translation to Practice (2-3c)

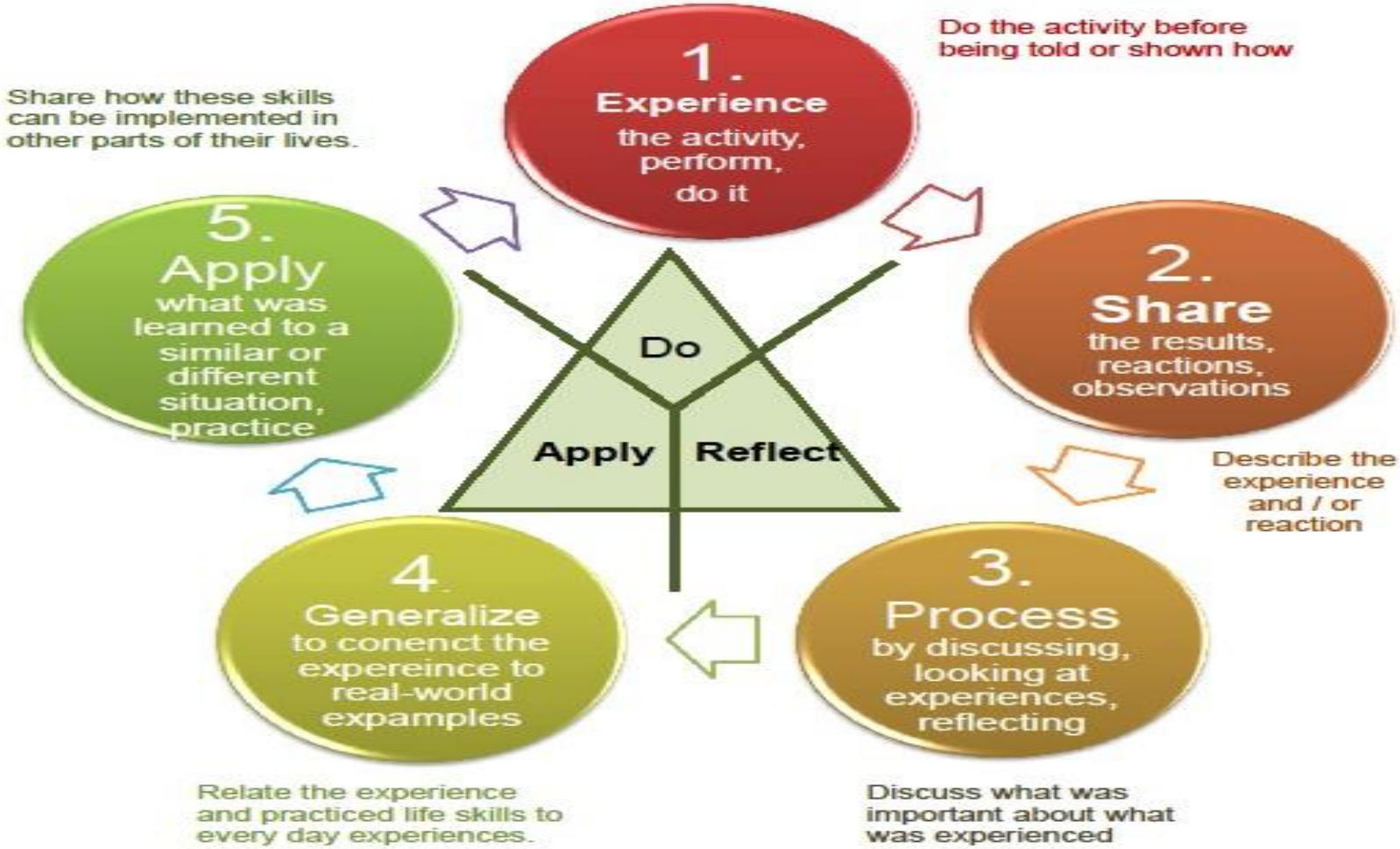
Core Competencies

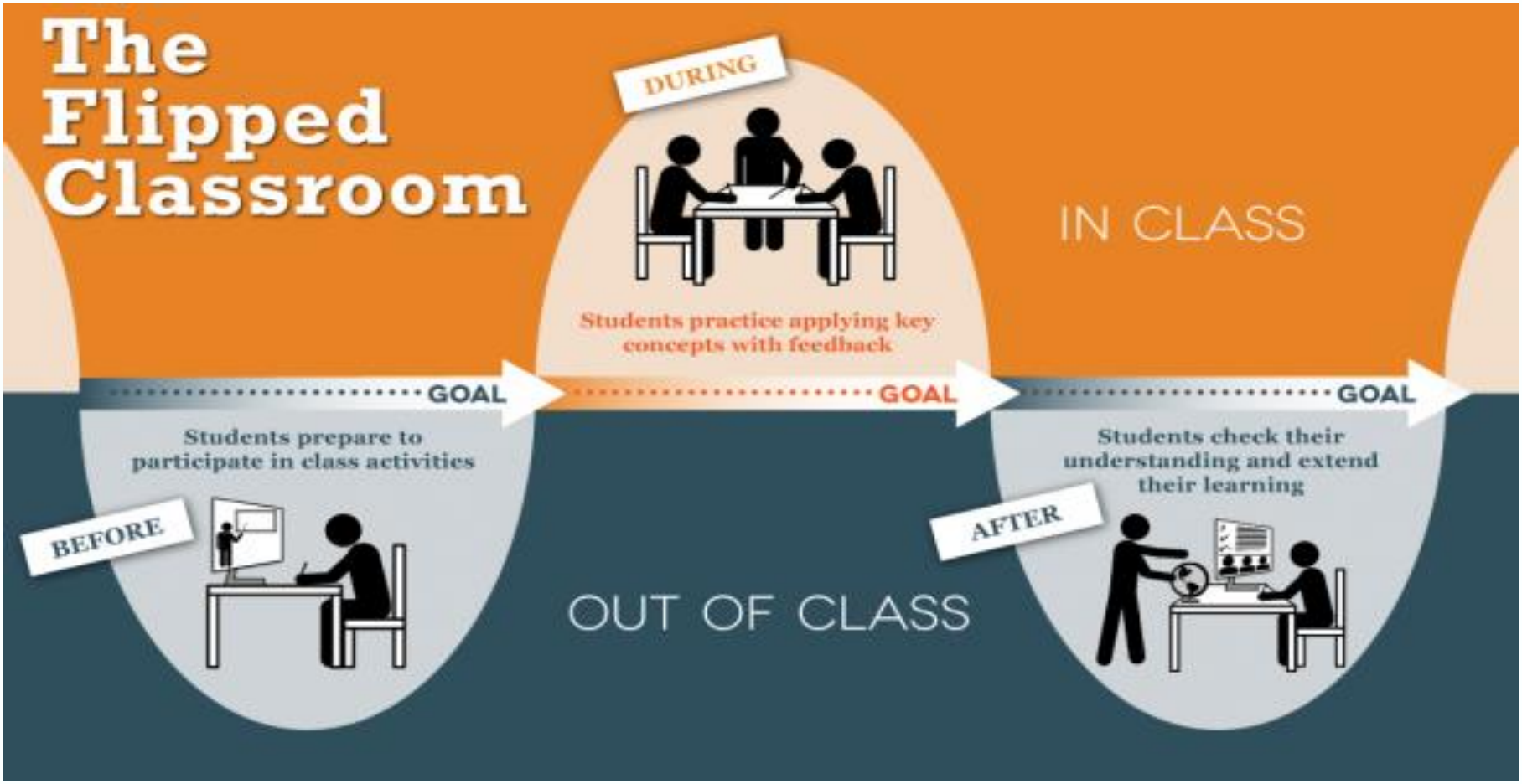
- Apply concepts and principles of program planning, development, budgeting, management and evaluation in organizational and community initiatives
- Demonstrate principles of effective functioning within and across organizations and as members of interdisciplinary and inter-professional teams in addition 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

History & Systems
Fall 1cr
Population Assessment 1
Fall 5cr
Population Assessment 2
Spring 3cr
Translation to Practice
Summer 3cr
Communications Ethics Leadership Values Clarification


AXIS OF NESTED HEIRARCHIES
Uphill
Global-level (Geopolitical, economic and environmental dynamics)
Macro-level (National/state and large-area dynamics)
Mezzo-level (work-sites, schools, communities, healthcare)
Micro-level (groups, family, social networks, etc)
Opportunities
Constraints
Down-hill/ Above water
Upstream
Conception/early-life
Embodiment
Human Action/ Behavior
Downstream
Late-life
Underwater
TIME AXIS
Expression
Multi-organ system level
Cellular level
Sub-cellular/molecular level
Genomic substrate ("the river bed")

Experiential Learning Model




The Flipped Classroom
DURING
IN CLASS
Students practice applying key concepts with feedback
GOAL
GOAL
GOAL
Students prepare to participate in class activities
BEFORE
Students check their understanding and extend their learning
AFTER
OUT OF CLASS

Course: Population Assessment	
Instructor	Rita DeBate
IDE Lead	
Date	First Day of Class
Module 1	**Systems Thinking and Public Health**
Lesson 1 Description	Part 1: Role of epidemiology in population assessment. Part 2: Socio-ecological model, life course model, Systems model, levels of prevention Part 3: Roles of biostatistics, socio-health science, health policy and management, environmental health and global health in population assessment.
Learning objectives	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. 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 LO 3. Examine determinants and feedback loops related to public health issues within and between levels of a systems framework 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. LO 5. Examine how a summary article on a selected disease relates to the systems framework.
TIME for Lesson	3 hours

LESSON PLAN		
Before Class	**Activities**	**(Learning Objective) Assessment**
	1. Read the following textbook chapters: ○ Epi: Chapter 1 (pp 1-18) ○ Bio: Chapter 1 (pp. 1-4) ○ Behavior Theory: Chapter 2 (pp 41-66) 2. Read the following articles: ○ An Educational and Ecological Approach ○ Determinants of Health ○ Childhood Origins of Adult Health: A Basis for Life-course health policy ○ Behavioral Science at the Crossroads in public health: Extending horizons, envisioning the future ○ Childhood Obesity 2010: Progress and Challenges 2. Watch the following video: TED Talk: What we learn before we're born: https://www.ted.com/talks/annie_murphy_paul_what_we_learn_before_we_re_born	(LO 1) Worksheet 1.1. ***Explaining childhood obesity from a systems framework and identifying primary, secondary, and tertiary prevention strategies***

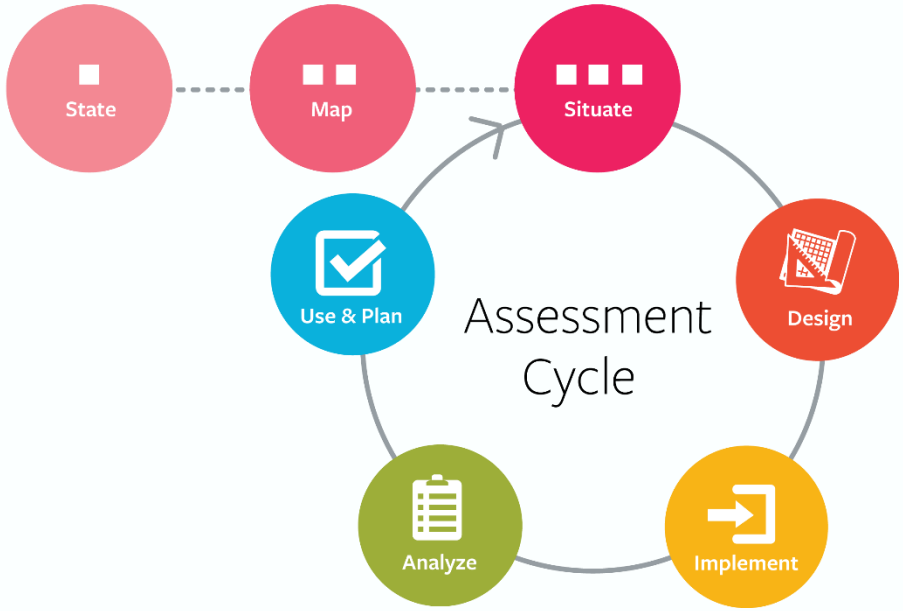
During Class	TIME	Activities
	30 min	Review syllabus, course format
	30 min	Introduction to Epi (definition, roles)
	10 min	***Think, pair, share*** ***HIV and Obesity per Epidemiological Triangle***
	10 min	***Report out.*** Review epi triangle with HIV, discuss how difficult it is to fit chronic disease with epi triangle
	20 min	Epi triangle based on infectious disease. Epi transition from infectious to chronic created the need for advanced epi triangle. Compare and contrast. And now ***ask students to fit obesity with advanced epi triangle.***
	5 min	Break
	15 min	Advanced epi triangle and socio-ecologic framework for population assessment
	15 min	Advanced epi triangle and life course model ***(discuss video)***
	30 min	Glass and McAtee Risk Factor/Risk Regulator SYSTEMS Model
	15 min	***Round Robin Application of Risk Factor/Regulator Model Systems model*** with childhood obesity ***(application of before class activity)***
	20 min	***Discussion*** of feedback loops
	15 min	***Discussion*** of key principles and skills from epidemiology, biostatistics, socio-health sciences, environmental health, and global health when assessing public health issues from a systems framework.

After Class	Activities	Assessment
	Analysis of Systems Levels in Literature Review Articles	LO2, LO3, LO5

"This really is an innovative approach, but I'm afraid we can't consider it. It's never been done before."

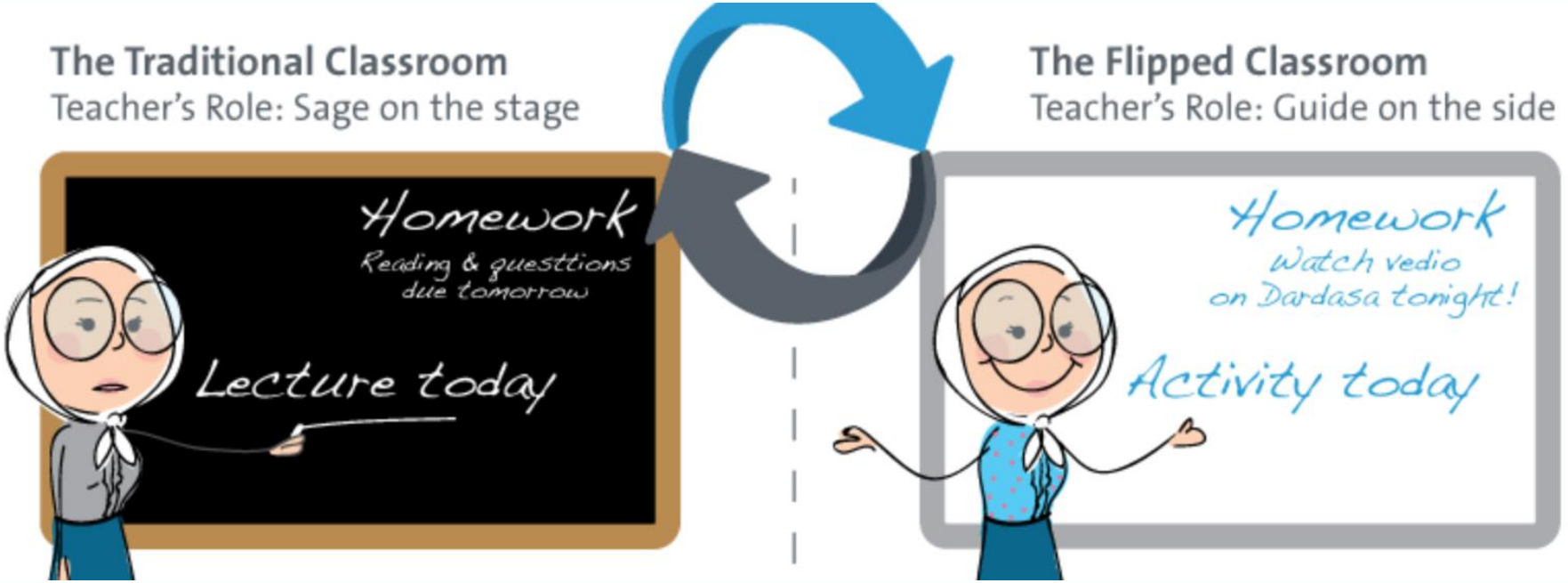
Session 4:

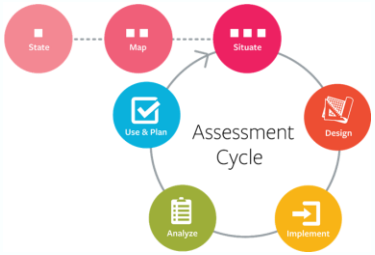
- ***Ready, Set, Evaluate:*** Piloting and revising your program of study



Pilot Testing

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



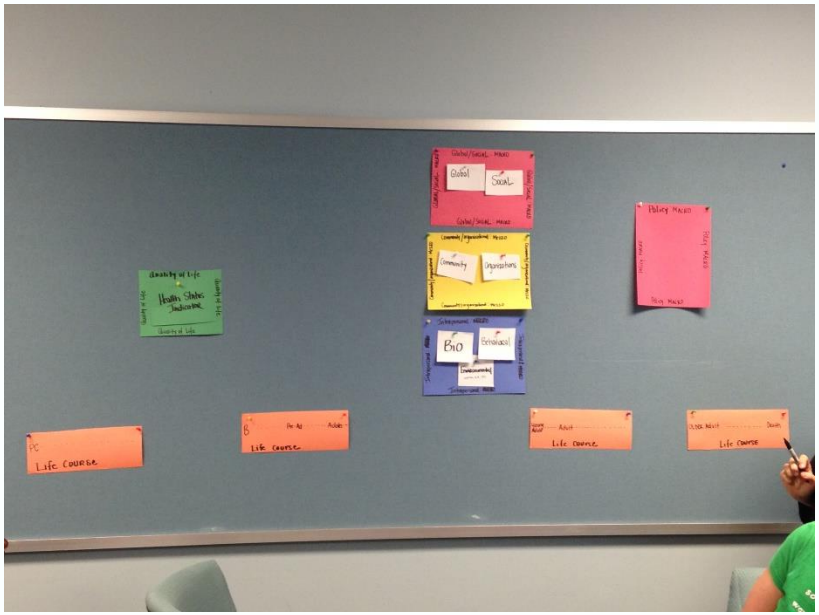


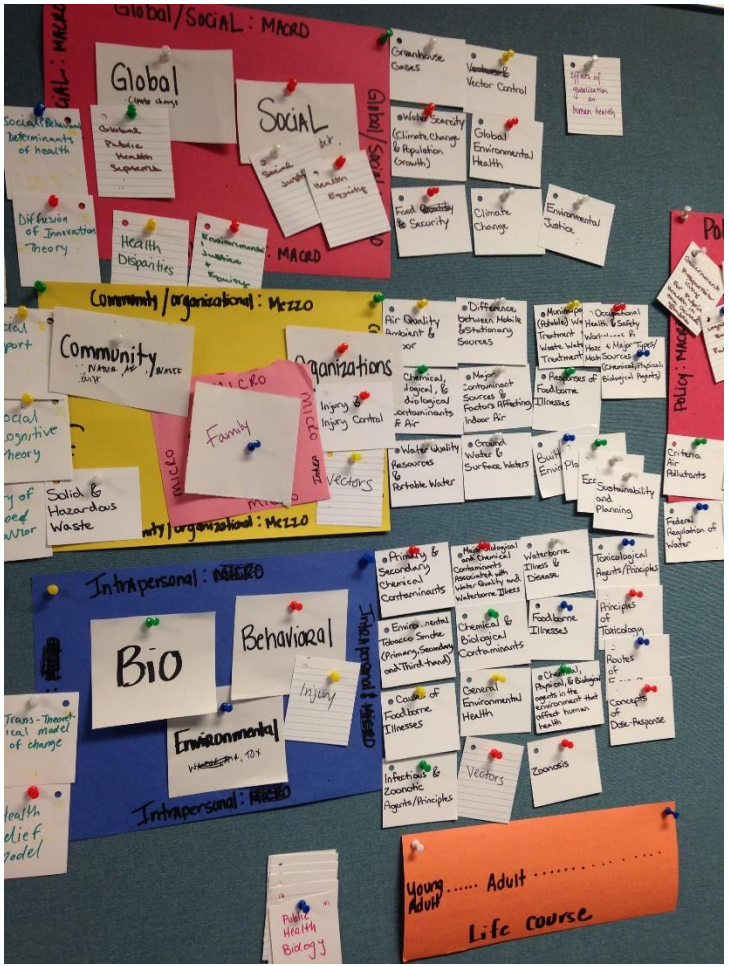
Process Evaluation

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

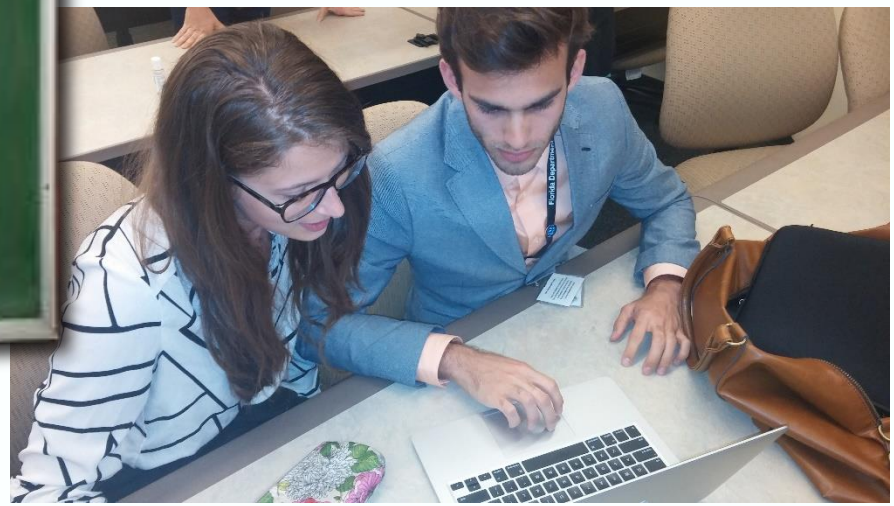
Revisions

- ***Driven by Key Stakeholder***
  - Students in the current core
- Guided by evaluation results





Lessons Learned
recognize mistakes
observe what works
document them
share them



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KEEP CALM THERE'S A PARADIGM SHIFT GOING ON

Enrolling 2nd Cohort
Fall 2016

"My profession has probably been transformed again just since we started this session."

Group Activity: Rate this lesson

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