

# TRANSFORMATIVE APPROACHES TO TEACHING AND LEARNING REPORT

**MARCH 2024** 

ASPPH FRAMING FUTURE 2030 EDUCATION FOR PUBLIC HEALTH



The *Transformative Approaches to Teaching and Learning* expert panel is part of the "Framing the Future 2030: Education for Public Health" (FTF 2030) project, initiated by the Association of Schools and Programs of Public Health (ASPPH) in 2020, which represents a pivotal shift in learning and teaching public health. Acknowledging the rapidly evolving global health landscape, marked by challenges like the COVID-19 pandemic, eroding public trust in health authorities, and persistent upstream social determinants of health such as racial and social inequalities, FTF 2030 aims to redefine and enhance education for public health. This initiative builds upon the earlier "Framing the Future" efforts (2011-2015), continuing the commitment to anticipate and meet emerging public health needs.

Central to FTF 2030 are the following three expert panel reports and executive summary



Building Inclusive Excellence through an Anti-racism Lens



Transformative Approaches to Teaching and Learning



Fostering Community
Partnerships for a Healthier
World

The panels' reports propose aspirational recommendations and questions intended to stimulate reflective dialogues among university leaders, faculty, staff, students, and partners. The initiative recognizes the diverse nature of ASPPH member institutions and seeks to offer broadly applicable recommendations to members and to all schools and programs of public health for their consideration in transforming education for influencing better health outcomes. The goal is to ensure that future public health professionals are equipped - not only with knowledge - but with future-ready competencies, including a sense of civic responsibility and adaptability to navigate the complexities of the public health landscape with a wide array of partners. The success of FTF 2030 is envisioned to reflect in the health and well-being of the communities served by these graduates, assisting in cocreating a healthier, more equitable and resilient world.



There has never been a more important time for academic public health to embrace transformative educational practices to prepare **learners** for the deliberative engagement that public health requires, both in the policy and community spheres, where professionals are called on to address issues characterized by profound disagreement (Allen et al., 2020). Partisan polarization (Rodgers, 2011, pp. 1-11; Oreskes and Conway, 2023, pp. 333-362) has been exacerbated by the COVID-19 pandemic (Gadarian et al., 2022), which also gave rise to attacks on elected officials, the field of public health, science more broadly (Hotez, 2023, pp. 64-86; Michaels, 2022; pp. 15-26; Pendergrast, et al., 2023), and higher education (Princeton University, 2023; Lipsky, 2023, pp. 195-401). Yet while confidence in higher education is eroding, it remains among the most trusted American institutions (Blake, 2023). It is urgent to buttress remaining trust by delivering on the promise of higher education and the health and safety protections that public health confers. Faced with an alarming rise in intimidation, harassment, and threats, our institutions work to ensure that campuses are physically safe spaces. In this context, in which stepping back may feel safer for those in the classroom, we are called on to create inclusive and pluralistic learning spaces bounded by norms of civility. We are called on to find the courage to take on the issues that most confound, enrage, and even frighten us. We are called on to foster curiosity and compassion in the face of morally salient differences that stir profound discomfort and tension. This reality sets a context for the recommendations that follow.

The FTF 2030 *Transformative Approaches to Teaching and Learning* expert panel (see the expert panel roster in **Appendix A**) defines transformative education as "involving critical exploration, questioning assumptions, and is achieved through teaching and learning that engages and empowers learners. The goal of transformative education in public health is to prepare learners to make informed decisions and drive meaningful actions, both locally and globally, at individual, institutional, and community levels" (see this definition and other terms used throughout this report in **Appendix B: Glossary of Teaching and Learning Terms of Reference**).

To achieve transformative education in public health, the panel proposes four recommendations for what—and how—schools and programs of public health (hereafter, schools and programs) teach:

Transformative Education in

1 CENTER civic engagement, cross-sectoral collaboration, and community partnerships as essential elements of the learning experience.

**GROUND** education in collective action to assess and address the social determinants of health.

3 USE active learning and support lifelong learning to prepare diverse, practice-ready professionals.

ASSURE ongoing training in evidence-based frameworks, methods, and technologies for teaching, learning, and assessment of educational outcomes.

These recommendations are accompanied by deliberative guiding questions that are adaptable across the five FTF 2030 driver domains, namely:university leadership and school or program administration; faculty; staff; learners; and community and other partners, including populations served and the public health workforce. The questions overlap the driver domains due to the interconnected nature of academic public health. Each set of questions is divided into two sub-categories: (a) administrative structures and processes and (b) curricula[1]. It is important to note that the deliberative guiding questions are general and, therefore, could be adjusted to translate to users' unique institutional administrative structures and curricular oversight processes.

Since ASPPH members reflect remarkable heterogeneity in size, mode, kind of unit, and setting[2] these recommendations are offered to stimulate critical reflection and collaborative conversations among members' diverse constituencies. The recommendations are suggested to apply broadly to the academic public health enterprise and are relevant across baccalaureate, master's-level, and doctoral degree programs.

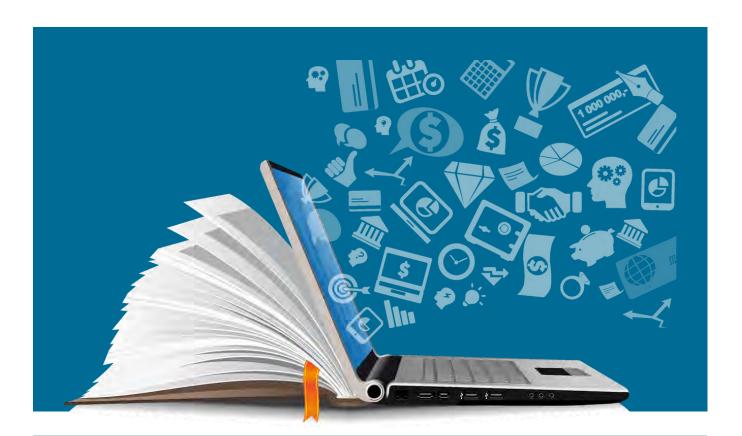
<sup>[1]</sup> The expert panel considers: administrative structures and processes to include strategies, policies, procedures, practices, and programs that support the school or program in systematically promoting learner success and advancing academic public health; and curricular initiatives to include degree programs, courses, certificates, training programs, and other non-degree credentials.

<sup>[2]</sup> Heterogeneity related to *size* of ASPPH-member schools and programs, by student enrollment, an indicator of institutional size, varied significantly during the 2022-2023 fall term, ranging from a low of 11 to a high of 4,929 students across all ASPPH-members' bachelor's, master's, and doctoral degree programs (Association of Schools and Programs of Public Health, 2023c). Faculty composition also exhibited a wide range, from a low of three to a high of 2,058 (Association of Schools and Programs of Public Health, 2023c). Relating to *mode*, 30% of MPH enrollments are in online-based degree programs (Association of Schools and Programs of Public Health, 2022). Regarding *kind*, 44% represent schools of public health, while 56% represent programs of public health, and 40% belong to private institutions, while 60% are affiliated with public institutions (Association of Schools and Programs of Public Health, 2023c). In terms of *setting*, 75% of ASPPH members are situated in urban areas, 10% in suburban areas, 4% have unknown locations, 3% are in towns, and none are in rural areas (Indiana University Center for Postsecondary Research (n.d.).

If and how change occurs within specific degree programs is left to each school and program to consider. The report and deliberative guiding questions could be used as a foundation for facilitated strategic planning sessions, retreats, and other convenings focused on enacting educational changes aligned with an institution's specific mission and goals. Focused discussions, reflection, prioritization, and decision-making about curricular and co-curricular changes, approaches to teaching and learning, and assessment strategies necessarily involve steps that examine and respect each school and program's setting, culture, structures, and teaching philosophies in relation to readiness for educational transformation.

The panel acknowledges that there is no single way to adopt or adapt these recommendations. In addition, any changes made based on the recommendations will vary depending on available resources at each program or school. ASPPH encourages members who have developed concrete, promising practices that are transforming education to share their examples and experiences through ASPPH's members-only Academic Public Health Resources Hub (the Hub) (<a href="https://my.aspph.org/advance/resources-hub">https://my.aspph.org/advance/resources-hub</a>). The Hub fosters continued collaboration and learning on educational and other issues. The recommendations and examples in this report are envisioned to help guide conversations about what success could look like by 2030 in a future educational system for public health that is inclusive, equitable, innovative, adaptable, and sustainable.

ASPPH conducted an internal vetting process of a pre-final draft of this report in October 2023 of 110 vested individuals engaged within or as partners of ASPPH. Thirty-nine percent of the 110 respondents participated in the survey, offering valuable insights and substantive comments (see **Appendix C** for a brief overview of the internal vetting process findings). Acknowledgement and gratitude go to the respondents for the time they took to complete the survey and for their support of academic public health.





As university leadership and school and program administration, faculty, staff, learners, and community and other partners reflect on how their parent institution, school, and/or program embrace transformative educational approaches to teaching and learning, conversations could begin with four framing questions:

- How do we demonstrate transformative educational practices that promote a culture of collaboration, inclusivity, mutual learning, and social justice?
- How are we creating safe and inclusive educational spaces that support shared curiosity and human compassion in exploring topics that may cause discomfort and tension?
- How do we engage in ongoing learning and self-reflection on transformative educational practices that address systemic barriers to health equity?
- How are we modeling a single, powerful mission statement about the importance of teaching and learning at our schools or programs?



#### CENTER CIVIC ENGAGEMENT, CROSS-SECTORAL COLLABORATION, AND COMMUNITY PARTNERSHIPS AS ESSENTIAL ELEMENTS OF THE LEARNING EXPERIENCE.

Preparing learners to enter public conversations in public spaces is essential to successful, contemporary **public health practice**, regardless of one's job position or role. Public health professionals are expected, and greatly needed, to shape public and policy conversations about population health (Hearne, Pollack Porter, & Forrest, 2023). They need training to develop a personal and professional commitment to engaging with diverse audiences. They also need competencies to communicate effectively on health issues with communities at the local, state, regional, national, and global levels.



Accordingly, teaching and learning for public health requires charging these emerging and evolving professionals with the responsibility for **civic engagement** (Allen et al., 2020) and serving as co-creators of a healthier future along with fellow individuals who hail from various lived experiences and community settings. Examples of civic engagement for public health include a gardening club that partners to eliminate food deserts (Allen et al., 2020), interprofessional student groups that offer community health screenings and other services (Bridges et al., 2011), barber shops that collaborate with public health leaders to disseminate health messages to their clients (Linnan et al., 2014), and local libraries working with academic public health to reach patrons on ways to protect their health and prevent disease (Pandolfelli et al., 2023).

Governmental public health is a vital contributor to the three core functions (Centers for Disease Control and Prevention, 2021), ten essential public health services for achieving equity (Centers for Disease Control and Prevention, 2023), and foundational public health services (Public Health National Center for Innovations, 2022) but various institutions have responsibility for population health and many sectors influence health. Engaging in a wide and diverse range of cross-sector collaboration is essential for addressing the broad social determinants of health (Auerbach, 2019).

### CENTER CIVIC ENGAGEMENT, CROSS-SECTORAL COLLABORATION, AND COMMUNITY PARTNERSHIPS AS ESSENTIAL ELEMENTS OF THE LEARNING EXPERIENCE.

This goes beyond interprofessional education focusing on public health learner participation in clinical health teams or even multidisciplinary teams. A strength of public health as a field is its perspective on population health as embedded in interconnected systems and sectors involving such contributors to health as housing, income inequality, neighborhood quality, environmental exposures, and structural racism. A priority of education in public health is to prepare learners to use systems thinking in comprehensive, collaborative cross-sectoral action with the aim of community empowerment to address upstream determinants.

Public health embodies a distinctive relationship with the community, broadly defined, and including both populations served and the public health workforce. The Code of Ethics for Public Health (APHA, 2019) emphasizes such principles as inclusivity and engagement; respecting the rights and agency of individuals in the community; anticipating and respecting diverse values, beliefs, and cultures; and empowerment of disenfranchised community members (Thomas et al., 2002). Helping learners develop the ability to partner with communities with humility, respect, authenticity, and awareness of policy levers and power structures is both a shared value of the public health profession and a route to effective action. Faculty members engaged in community partnerships serve as significant role models, exemplifying the school and program's overarching dedication to enhancing population health and supporting the public health workforce in contributing their vital work (Halkitis & Magaña, 2023). Applying academic public health scholarship to community outreach and service requires rigorous standards aligned with value and reward structures that incentivize behaviors and practices (Potter et al., 2009). Mutually beneficial relationships and bidirectional practices help create and sustain such commitments, an excellent example of which is the academic health department model (Conte et al., 2006).

Preparing learners to succeed in civic engagement, cross-sectoral collaboration, and community partnerships requires competencies in:

Advocacy	Budgets and finance	Change management, decision- making, and decision-support	
Communication, both oral and written, and including issue framing and the promotion of civil discourse	Community partnerships and engagement, including building trust and coalitions	Policy development and evaluation	
Program planning	Public health ethics and law	Systems and strategic thinking	

all with an understanding of the historical, social, and political context in which one is working (Cohen, 2023; Council on Linkages Between Academia and Public Health Practice, 2021; de Beaumont, 2021; de Beaumont & Association of State and Territorial Health Officials, 2021; Duke Global Health Innovation Center, Duke Global Health Institute, & Duke Margolis Center for Health Policy 2023; Leischow et al., 2008).



Schools and programs aiming to center civic engagement, cross-sectoral collaboration, and community partnerships as essential elements of the learning experience are encouraged to ask themselves:

#### ADMINISTRATIVE STRUCTURES AND PROCESSES

- 1.1 How does the school or program demonstrate a commitment to addressing community needs through education, training, and partnerships? Note: this recommendation aligns with CEPH's F1: Community Involvement in School or Program Evaluation & Assessment and F3: Delivery of Professional Development Opportunities for the Workforce requirements (Council on Education for Public Health, 2021).
- 1.2 How are faculty supported, recognized, and rewarded for including learners in the process of data collection, analysis, synthesizing, and publication? How are faculty trained, supported, recognized, and rewarded for modeling to learners how to translate research findings for public and policy audiences (e.g., are faculty trained to write op-eds or is the policy relevance or impact of their work considered in tenure and promotion decisions)?
- 1.3 How are faculty efforts in civic engagement, cross-sectoral collaboration, and community partnerships reflected in tenure and promotion documents and then valued in the tenure and promotion process?
- 1.4 What emphasis is given to engaging with ethics, law, policy, advocacy, and coalition building in all degree programs? To what extent is this teaching and learning scaffolded so that learners develop a deep, actionable understanding of both historical and current events? How well are learners able to communicate and promote public health ethics and values to meet audience perspectives and needs?
- **1.5** How are faculty prepared to develop and maintain diverse, cross-sectoral collaborations?
- How does the school or program incentivize and reward faculty and staff for integrating practice-based and community-informed perspectives into classroom and other learning experiences?
- **1.7** How does our institution reward, recognize, and/or compensate community partners and organizations for their time and labor?
- **1.8** What opportunities exist to establish or expand cross-departmental and cross-unit collaboration for offering degrees, certificates, and/or training opportunities?

#### **DELIBERATIVE GUIDING QUESTIONS**

- 1.9 How do faculty use authentic assessment methods that provide learners opportunities to frame and translate evidence and values for the public and policy conversation? For example, how do both research and teaching align with community-based work for building effective coalitions with a focus on advocacy for broader policy issues?
- **1.10** To what extent are we recruiting faculty and staff with the background and expertise to help learners prepare for civic engagement, cross-sectoral collaboration, and community partnerships? To what extent do we provide training to current faculty and staff in these areas?
- **1.11** How can our schools and programs cultivate greater input from communities to inform developing, implementing, and assessing curricula?

#### **CURRICULAR INITIATIVES**

- **1.12** How are learners prepared to engage in civil discourse and build trust with colleagues, community members, and local, state, federal, and global leaders on public health issues?
- **1.13** How do learners have access to and take advantage of opportunities to engage in policy processes and practices or programs at the institutional, local, state, federal, or global levels?
- **1.14** What are the curricular opportunities for engagement with sectors and partners that reflect the nature and scope of 21st-century public health (e.g., private/public/non-profit/for-profit organizations, professionals, community members, policymakers, the general public)?
- **1.15** To what extent does our curriculum as a whole support a systems view of population health, so that learners develop systems thinking skills for analyzing and addressing complex public health issues and avoiding unintended consequences?
- **1.16** How are learners enabled to build professional networks, practice professionalism, fill industry and community needs, and positively impact public health in collaboration with other disciplines and professions? How are these opportunities sustained?
- **1.17** How can learners prepare to share power, collaborate with community members to set their own priorities, and build coalitions?
- 1.18 How does the curriculum guide learners to respect diverse cultural beliefs and practices that influence health and healthcare decision-making? How does the curriculum prepare learners to seek out diverse perspectives, drawing from lived experiences and histories, cultures, socio-economic backgrounds, and perspectives representing a wide range of values and priorities? How are learners prepared to collaborate with community partners historically most harmed by discrimination and oppression?
- **1.19** What other learner competencies are needed for civic engagement, cross-sectoral collaboration, and community partnerships that advance public health to meet the needs of specific populations of interest? How are these competencies assessed?

# GROUND EDUCATION IN COLLECTIVE ACTION TO ASSESS AND ADDRESS THE SOCIAL DETERMINANTS OF HEALTH

Practicing public health in today's complex socio-political context requires **collective action** (Kania & Kramer, 2011) for supporting, "what we as a society do collectively to assure the conditions in which people can be healthy" (Institute of Medicine, 1988). Accordingly, transformative education for public health involves integrated, less-siloed curricular and extracurricular opportunities for developing the capacity of learners, faculty, administrators, and academic institutions to work together in more impactful, upstream methods to advance health. While attending to upstream factors shaping health has distinguished public health thinking since the mid-19th century (Birn, 2009), serious discussions of social justice to address the determinants that create disparities and inequities among subpopulations did not begin in the US until the early 1980s (Daniels, Kennedy, & Kawachi, 1999).





Since the early 20th century, there has been a growing consensus that focusing on upstream ecological factors (Frieden, 2010; Golden et al., 2015), such as reducing overall income gradients and policies or practices that limit the transfer of wealth for some groups, yields greater positive health outcomes compared to the modification of downstream individual health behaviors, such as one-on-one counseling and health education. Despite the centrality of social justice and equity within public health, both national and global responses to health challenges, along with the education that readies learners for practice, remain largely stuck downstream with a focus on personal, behavioral change interventions (Fairchild et al., 2010).

#### GROUND EDUCATION IN COLLECTIVE ACTION TO ASSESS AND ADDRESS THE SOCIAL DETERMINANTS OF HEALTH

While schools and programs do their part to advance health, deep embedding, and systematic integration of the social determinants of health across the curriculum represents a vital shift for academic public health, particularly to include attention to the historical roots and contemporary contexts that shape population well-being. The following definitions will help explain.

According to the National Institutes of Health (NIH), the social determinants of health are

# The conditions and environments in which people are born, live, work, play, worship, and age [that represent]... nonmedical factors affect[ing] a wide-range of health and quality-of-life outcomes and risks

(2023a)

In addition, the World Health Organization underscores the importance of explicitly recognizing the commercial determinants of health as a key social determinant, described as "the conditions, actions and omissions by commercial actors that affect health. Commercial determinants arise in the context of the provision of goods or services for payment and include commercial activities, as well as the environment in which commerce takes place. They can have beneficial or detrimental impacts on health" (2023). These social determinants are influenced by structural racism and discrimination, which refers to "macro-level conditions (e.g., residential segregation and institutional policies) that limit opportunities, resources, power, and wellbeing of individuals and populations based on race/ethnicity and other statuses" (2023b). The role of the social determinants of health in producing health disparities for discerning and promoting effective means of preventing or remediating unhealthy outcomes for all segments of society is accepted, but not necessarily embraced and acted upon. Acting upon these realities requires academic public health to assess whether we have truly set our sights on influencing structural health determinants and are preparing our graduates, not only to respond to threats as they arise, but also to take proactive measures to address long-standing barriers to health.





Grounding education in collective action to assess and address the social determinants of health could begin with ASPPH-member schools and programs asking themselves:

#### **ADMINISTRATIVE STRUCTURES AND PROCESSES**

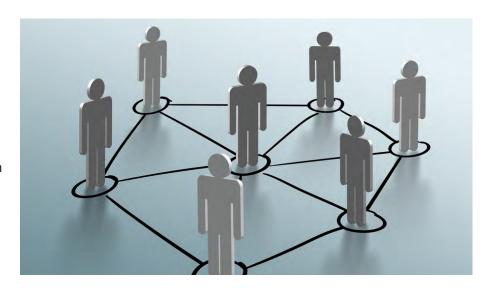
- degree programs? To what extent is this teaching and learning scaffolded so that learners develop a deep, rather than cursory, understanding? Is there sufficient required material related to social epidemiology, community-based interventions, public health ethics and law, and the history of public health with an emphasis on community assets, capacities, disparities, inequities, community-identified needs, and coalition building for collective action?
- 2.2 What opportunities does the general education (Gen Ed) curriculum of the university offer learners from all disciplines to gain exposure to the social determinants of health in a meaningful way?
- 2.3 How expansive is the treatment of the determinants of population health in all programs? How are the social determinants of health described as both products of contemporary circumstance, but also as part of our shared history?
- 2.4 How are the commercial determinants of health covered in relation to the escalating rates of planetary damage and socially- and environmentally-based health inequities?

#### **CURRICULAR INITIATIVES**

- 2.5 How can classroom and experiential learning opportunities prepare learners for collective action within the complex web of systems and sectors that determine population health?
- **2.6** How can learners examine power relationships in the determinants of population health?
- **2.7** How do our curricula help learners move from understanding the social determinants of health to achieving societal transformation?

#### USE ACTIVE LEARNING AND SUPPORT LIFELONG LEARNING TO PREPARE DIVERSE, PRACTICE-READY PROFESSIONALS.

Public health is a dynamic phenomenon, requiring learners preparing for practice to develop programs, procedures, policies, services, strategies, structures, and systems that ensure conditions for health across all communities and contexts within an ever-changing and interconnected landscape (Centers for Disease Control and Prevention, 2023).



While classroom training can be dynamic, with case studies, discussions, debates, guest speakers/panels, problem-based learning, role plays, and simulations, learners need more than lecture-based learning to emerge ready to ensure populations are free from preventable disease and harm. For decades, the educational practice of **active learning** has been shown to deepen understanding and allow learners to transfer knowledge to other contexts (Cavanagh, 2016; Neubauer et al., 2022) and, furthermore, raises learner scores and reduces course failure rates in both developed (Godley et al., 2021) and developing countries (Ibrahim, Sulaiman, & Ali, 2022).

Because public health learners stand to benefit from **applied learning**, **authentic learning**, and **experiential learning** that enables them to translate knowledge, skills, and attitudes into real settings and situations, the accrediting body for academic public health, the Council on Education for Public Health (CEPH), promotes among the possible indicators of faculty instructional effectiveness "Courses that employ active learning techniques" (Council on Education for Public Health, 2021). While CEPH does not require such techniques, active learning more effectively prepares graduates to flex, adapt, and continually learn to effect change (Boston University, 2023). These abilities make for more nimble, practice-ready professionals.

### USE ACTIVE LEARNING AND SUPPORT LIFELONG LEARNING TO PREPARE DIVERSE, PRACTICE-READY PROFESSIONALS.

For example, as important as it is to train learners to carry out the steps necessary to calculate disease prevalence, such education is incomplete without knowledge of the community and its many relevant contextual factors. Likewise, including and engaging communities in planning before interventions are implemented is one of the hallmarks for success in public health practice. To understand the meaning and implications of actions in various contexts, the most successful learners go beyond rote learning to observe and participate in how public health concepts and programs are received in real-world contexts. It is only through practice – using methods like community-engaged activities, drills, role plays, simulations, or "think labs – in authentic settings that learners grasp techniques to adapt and tailor solutions based on real-world needs and capacities.

The persistent public health workforce shortage and skill gaps and an exodus of public health professionals in recent years (Bogaert et al., 2019; Halkitis & Magańa, 2023), exacerbated by crises such as the COVID-19 pandemic (Leider et al., 2023) and opioid epidemic, point to the need for graduates who are practice-ready on day one (Miles-Richardson, 2019). Often, our graduates are among the few in their organizations who have been explicitly trained in the skills needed to carry out their organizations' missions and meet the complex health needs of the populations they serve (University at Buffalo School of Public Health and Health Professions, 2022-2023).

Given the dynamic and interconnected landscape in which public health professionals and their partners operate, public health practice also requires a commitment to **lifelong learning** as part of a degree that keeps one practice-ready throughout one's career. Academic public health can help learners develop an orientation to lifelong learning by providing extensive opportunities for learners to cultivate curiosity for problem-solving as individuals and in teams through activities that require self-initiation, robust information-seeking skills, and the ability to self-identify learning needs (Babenko et al., 2017). True lifelong learners who are prepared to grow and advance within institutions are especially important for governmental public health, which is reported to need to increase by nearly 80% to provide adequate infrastructure and a minimum package of public health services (de Beaumont Foundation & Public Health National Center for Innovation, 2021).

To facilitate optimal teaching for student learning, administrators, faculty, and staff represent an important group of co-learners who would benefit from embracing a growth mindset and planning for their own lifelong learning.



As this shift represents a change from how we have conceptualized education in public health previously, schools and programs could begin or continue conversations around using active learning and supporting lifelong learning to prepare diverse, practice-ready professionals by asking:

#### **ADMINISTRATIVE STRUCTURES AND PROCESSES**

- 3.1 Since practice readiness changes over time, how do schools or programs sustain a continual process of updating education, with corresponding assessments and feedback from employers?
- What learning opportunities exist for degree enhancement (continuing education, certificates, badges, or other microcredentials) in the determinants of population health and civic engagement? How do these opportunities embrace active learning methodologies?
- maintain curiosity for problem-solving, selfidentify learning needs, and develop an orientation to lifelong learning? What resources exist to support active learning and foster lifelong learning for learners in all curricular offerings?
- 3.4 How do schools or programs demonstrate a commitment to active learning and supporting lifelong learning? How do physical and online learning spaces and technologies support active learning?



#### **CURRICULAR INITIATIVES**

- 3.5 How does our curriculum emphasize active and experiential learning that involves learners in collaborative problemsolving that resembles workforce settings? How many courses use active learning techniques (community-engaged activities, drills, role plays, simulations, "think labs," etc.)?
- 3.6 How are various dimensions of student buy-in, readiness, and capacity for active learning considered, including student abilities, motivations, perceptions, classroom climate, and prior experiences with learning?
- 3.7 How are practitioners and professionals at practice-based organizations engaged in designing and teaching public health courses and concepts? How are they engaged in guiding learners through real-world activities? How do they contribute to assessing learners in applying their newly learned or enhanced skills?
- 3.8 How do practitioners and professionals work with faculty to craft active learning approaches that help learners to become practice-ready and to respond to ethical challenges, moral conflict, and the politics of public health? How do they also work to develop healthy approaches to dealing with stress and preventing burnout?
- 3.9 How are active learning opportunities provided in the curriculum to help learners develop a lifelong learning mindset? How often do learners problem-solve in teams? How are learners challenged to identify needs for learning, find information, and independently (whether as individuals or teams) develop solutions?
- 3.10 How are learners supported to reflect on their educational experiences and knowledge and skill development? How do active learning approaches support learners in their intellectual and emotional growth and acquisition of technical abilities as they develop significance and meaning for their lives as public health professionals?





#### ASSURE ONGOING TRAINING IN EVIDENCE-BASED FRAMEWORKS, METHODS, AND TECHNOLOGIES FOR TEACHING, LEARNING, AND ASSESSMENT OF EDUCATIONAL OUTCOMES.

For much of the past century, education in public health largely has not kept pace with the rapid changes in the field. From the publication of the Welch Rose Report in 1915, as Framing the Future 2011-2015 highlighted, until CEPH published core competencies for Master of Public Health (MPH) and Doctor of Public Health (DrPH) practice in 2016 (Council for Education in Public Health, 2021), education in public health was both relatively static and not well-defined. The demand (Association of Schools and Programs of Public Health, 2023c) for responsive and innovative education in public health is immense (Neubauer et al., 2022). Education that meets current and future challenges is especially needed for fueling graduates entering strained health systems that are under-resourced for comprehensive public health practice (Association of Schools and Programs of Public Health, 2022).



Today's increasingly diverse group of learners entering public health training and participating in continuing education present unique teaching and learning challenges and opportunities.

Contemporary learners pursuing degree and nondegree credentials bring varying levels of prior preparation, a wide spectrum of professional experiences, and a mix of learning strengths and gaps. Faculty stand to benefit from training on how to meet modern public health learners using a variety of evidence-based methods, competency-based approaches, high-impact educational practices, technology (which is rapidly evolving), and assessments.

## ASSURE ONGOING TRAINING IN EVIDENCE-BASED FRAMEWORKS, METHODS, AND TECHNOLOGIES FOR TEACHING, LEARNING, AND ASSESSMENT OF EDUCATIONAL OUTCOMES.

The Scholarship of Teaching and Learning (SoTL) has received significant attention in higher education over the past 25 years (McBride & Kanekar, 2015). SoTL guides faculty to examine teaching practices, review scholarly pedagogical literature, understand and apply learning theories, and assess learner learning outcomes in order to improve both teaching practices and enhance learning (Cruz et al, 2019; Neubauer et al., 2022). CEPH now explicitly highlights the scholarship of teaching and learning as an acceptable research area under their criterion E4. Faculty Scholarship and encourages "higher-level assessments" under school and program-level outcomes within their criterion E3. Faculty Instructional Effectiveness (Council on Education for Public Health, 2021). Yet only 52% of ASPPH members reported in 2017 that public health faculty have formal resources to train in pedagogical theories and practices that could facilitate their deployment of these approaches (Association of Schools and Programs of Public Health, 2017). Colleges and universities are responsible for ensuring that robust opportunities are available, and that faculty take advantage of them. Schools and programs can do their part to help prepare the faculty for the future.

CEPH's pedagogical 2016 competency-mandated requirements for the DrPH degree:

- 19. Deliver training or educational experiences that promote learning in academic, organizational, or community settings
- 20. Use best practice modalities in pedagogical practices (Council on Education for Public Health, 2021)

is one example that could be referenced to help to shift the tide for graduates across other degree programs. Similar CEPH requirements could apply to PhD candidates. While some schools and programs require such training, making it explicit as an expectation of all public health doctoral graduates could demonstrate an institutional commitment to teaching, not just as a duty, but as a critical real-world skill for transformative education in academic public health. Public health schools and programs can help to transform higher education by making a bold commitment to education in teaching and learning for all graduates regardless of degree.

Developing faculty to conduct, document, and disseminate research into promising teaching and learning practices within academic public health is tied to elevating teaching as a scholarly, science-based act for producing well-prepared graduates who both contribute to a ready workforce and can improve the health of the public (Godley et al., 2021). Faculty at many institutions excel in research and scholarship in public health disciplines but lack training or resources (Association of Schools and Programs of Public Health, 2017) to design curricula or implement teaching strategies to meet future skill needs of the field. Priority must be given to excellence in teaching by preparing faculty to leverage novel learner-centered instructional strategies. These include Universal Design for Learning (UDL), by which students are engaged and assessed using a variety of evidence-based strategies in more flexible learning environments and Transparency in Learning and Teaching (TILT), an approach to equity and transparency in designing and scaffolding teaching and learning that positions learners, especially first-generation, low-income, and underrepresented college students, for success (Winkelmes et al., 2016).

### ASSURE ONGOING TRAINING IN EVIDENCE-BASED FRAMEWORKS, METHODS, AND TECHNOLOGIES FOR TEACHING, LEARNING, AND ASSESSMENT OF EDUCATIONAL OUTCOMES.

As institutions shift toward more transformative educational frameworks, methods, and technologies that rely on active, experiential learning, the **authentic assessment** of learning outcomes emerges as an important precursor for enhancing teaching and learning in public health. This increased focus on pedagogy requires deliberate attention to alternatives to traditional testing, encompassing formative, summative, authentic, and practice-based assessment (Nicol & Macfarlane-Dick, 2006; Robinson et al., 2015).

While most faculty are familiar with different kinds of assessments that support progressive learning expected of adults and professionals, transformative education pushes towards:

- Authentic assessment (Wiggins, 1990), which is less well-understood but important for mirroring behaviors expected of graduates in real-world performance in a discipline or field. Authentic assessment aims to draw from learners' directly observable products and measurable evidence as demonstrated in an applied, practical situation (Wiggins, 2011).
- *Practice-based skill application and assessment*, which provides the learner an opportunity to apply their learning in a real-world setting.

Assessing learners on their ability to create, for example, products that public health organizations and industry could use, rather than displaying a mere command of facts and figures, delivers more relevant and impactful opportunities for the learner and performance outcomes for the field. After delivering new content in class, it is important immediately to give students the opportunity to apply those skills. Hands-on activities right after instruction allow them to translate the content into new or enhanced abilities. Providing ways for students to promptly put their knowledge into practice is vital for developing a workforce-ready pool of talent.

Additionally, learners benefit when faculty adapt teaching and learning to meet new and emerging trends. Both rapidly changing technology, like generative artificial intelligence (AI), and more familiar technology, like videotaped assessments to provide more relatable feedback to learners, present untapped opportunities and challenges. A vital caveat is to consider the ethical use of these tools and technologies and align instruction methods with social justice values. Educators learning about innovative technologies such as AI both increase their abilities to instruct students and evaluate coursework and are better positioned to prepare students for applying tech into their own public health practice. Regardless of the technology, the imperative for faculty development to embrace and optimize new modalities of teaching and learning has never been more important and in need of increased investment. But faculty cannot be expected to learn and adopt new technology without institutional expectations and incentives backed by robust learning opportunities at the university level. Schools and programs can serve as the voice making the case for these resources and expectations.



To establish a sustainable infrastructure for supporting and incentivizing evidence-based teaching and learning frameworks and methods, ensuring more effective assessments for improving learning outcomes, and excelling in the adoption and adaptation of technology in academic public health, schools and programs could ask themselves:

#### ADMINISTRATIVE STRUCTURES AND PROCESSES

- **4.1** What are our school or program's stated goals and evaluation measures for supporting the scholarship of teaching and learning (SoTL) that reflect their overall mission, values, and philosophies for preparing graduates for the public health workforce?
- **4.2** How has our school or program created a culturally and intellectually diverse learning environment that values SoTL teaching excellence and elevates SoTL as a scholarly act?
- **4.3** What opportunities currently exist, or can be created, to support cross-disciplinary learning communities that engage in SoTL inquiry and research?
- **4.4** What training and incentives are available and required for new and established faculty to engage as consumers of SoTL research and adopt innovative teaching methods that promote transformative education practices?
- **4.5** What models for hiring, promotion, tenure, and reward systems exist that recognize the value and contributions of teaching and applied learning and practice-based experiences? How are these reflected in tenure and promotion guidelines?
- 4.6 What training, recognition, and reward policies and procedures support faculty to produce and disseminate their own SoTL research and to become institutional, national, or global leaders in teaching and learning in academic public health? How are these reflected in tenure and promotion guidelines?
- **4.7** How do administrators, faculty, and staff collaborate in adopting and adapting technology in teaching and learning for public health? How are our faculty and staff trained in new technologies such as artificial intelligence (AI), including its strengths and limitations, to enhance learner learning and engagement?

#### **DELIBERATIVE GUIDING QUESTIONS**

- **4.8** How are our faculty and staff supported to enact Universal Design for Learning approaches to teaching and learning, including the incorporation of multimedia and technology tools, such as online resources, videos, podcasts, and social media platforms?
- **4.9** How does our school or program prepare faculty and staff to ensure instructional effectiveness in formative, summative, authentic, and practice-based assessments?

#### **CURRICULAR INITIATIVES**

- **4.10** How are recommendations 1-3 in this report connected to evidence-based methods and technologies for teaching, learning, and assessment of educational outcomes?
- **4.11** How are teaching and learning assessments grounded in the scholarship of teaching and learning literature and/or designed to advance SoTL in public health?
- **4.12** How are faculty and staff making educational practices transparent to learners?
- **4.13** How are faculty using authentic assessments such as: program evaluation summary reports, social media posts, health communication campaigns, grant proposals, program budgets, and/or community presentations to promote learner success and/or improve public health?





Although the path to transformation is complex and involves a systems-level approach to change, mindfulness of the urgency of action and the power of small, consistent steps can guide schools and programs to plan their response to this call to action. Whether large or small, all can make progress toward achieving this report's recommendations. Many starting points are possible, and the following approach is offered for consideration:

- 1. **Share** this report with the key drivers of academic public health at your school or program: administrative leaders, faculty, staff, students, and community partners.
- 2. **Conduct** an honest assessment of the status of school or program resources and infrastructure devoted to transformative education with an emphasis on the priorities laid out in this report. Identify what you have already accomplished, which can build momentum to plan and implement future changes.
- 3. **Use** the deliberative questions, adapting them and incorporating other questions generated by participants as needed, to promote honest discussions and to spark creative solutions to enhancing transformative education practices and policies at your institution.
- 4. *Identify* your school or program transformative education "North Star" or direction for 2030. Recognizing the unique contexts and resources at your institution, identify the steps to make sustainable changes that both address priority recommendations and contribute to transformative education changes in academic public health.
- 5. **Disseminate** this report widely to deans of other schools, fellow program directors, and other institutional academic leaders, including the provost of your university. While this FTF 2030 vision is specific to public health, the panel recognizes that public health and other scholarly/scientific expertise can be found in all areas of the university. Use this document to advocate for broader institutional adoption of transformative education practices and for enhanced academic public health collaboration in related institutional initiatives. Doing so can not only enhance your school or program and its position in the university, but augment university teaching and learning as a whole.



This initiative aims to inspire users to engage in an intentional and deliberative process in which they examine and interrogate the teaching and learning paradigms, practices, and results of their educational enterprise. Each reader of this report is invited to consider their vested drivers, constituents, and local context along with their missions, values, philosophies, and resource capacities in light of their own unique appetite and passion for culture change and transformation. The expert panel acknowledges that there is no "correct" way to approach and fulfill all, some, or even any of this report's recommendations. ASPPH commits to supporting member schools and programs choosing to implement policy and programmatic changes that drive toward educational transformation by 2030.

The report's success depends on how well it guides schools and programs to prepare and train students to become engaged citizens, develop unique public health competencies, and make an impact in protecting health across multiple arenas. The goal is to develop competent practitioners who contribute to society. It is these individuals working for structural and systems change by addressing the upstream social determinants of health who will help deliver a more resilient educational system for public health that serves populations, bolsters the public health workforce, and helps fulfill the promise of public health across the globe.

#### **APPENDIX A:**

# FRAMING THE FUTURE 2030: TRANSFORMATIVE EDUCATION AND PEDAGOGY EXPERT PANEL MEMBERS

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**APPENDIX B:** 

# GLOSSARY OF TEACHING AND LEARNING TERMS OF REFERENCE

The following terms support this report and are not meant to represent terms the field should adopt:

**Active learning** is "anything that involves students in doing things and thinking about the things they are doing" (Bonwell & Eison, 1991, p. 19). Active learning is associated with a wide variety of learning strategies and attention to multiple dimensions of learning including, participation, experience, critique, interpersonal interactions, and student-directed learning (Carr et al., 2015).

**Applied learning** is "an educational approach whereby students learn by engaging in direct application of skills, theories, and models. Students apply knowledge and skills gained from ... learning [experiences] to hands-on and/or real-world settings, creative projects or independent or directed research, and in turn apply what is gained from the applied experience to academic learning. The applied learning activity can occur outside of the traditional classroom experience and/or could be embedded as part of a course" (State University of New York, 2023, Paragraph 2).

**Authentic assessment** draws from directly observable products and measurable evidence that learners demonstrate in an applied, practical situation (Glossary of Education Reform, 2023; Wiggins, 2011).

**Authentic learning** is represented by "a wide variety of educational and instructional techniques focused on connecting what students are taught in school to real-world issues, problems, and applications. The basic idea is that students are more likely to be interested in what they are learning, more motivated to learn new concepts and skills, and better prepared to succeed in college, careers, and adulthood if what they are learning mirrors real-life contexts, equips them with practical and useful skills, and addresses topics that are relevant and applicable to their lives outside of school" (Glossary of Education Reform, 2023, Paragraph 1).

**Civic engagement** is "any activity that involves or is intended to affect not only the interests or work of a particular group of faith or affinity but those of a broader community (whether defined locally, nationally, or globally)" (Allen et al., 2020, Appendix A: Key Terms).

**Collective action** refers to coordinated efforts made by a group of people who aim to achieve a common objective (Kania & Kramer, 2011), which for public health has been defined as "what we, as a society, do collectively to assure the conditions in which people can be healthy" (Institute of Medicine, 1988, p. 1).

#### APPENDIX B: GLOSSARY OF TEACHING AND LEARNING TERMS OF REFERENCE

**Commercial determinants** of health refer to "the conditions, actions and omissions by commercial actors that affect health. Commercial determinants arise in the context of the provision of goods or services for payment and include commercial activities, as well as the environment in which commerce takes place.

They can have beneficial or detrimental impacts on health" (World Health Organization, 2023, Overview, Paragraph 2).

**Experiential learning** is "an engaged learning process whereby students 'learn by doing' and by reflecting on the experience. Experiential learning activities can include, but are not limited to, classroom exercises, handson laboratory experiments, internships, practicums, field exercises, study abroad, ... research and studio performances" (lowa College of Liberal Arts and Sciences, 2023, Paragraph 1). In experience, the connections to people and place ensures "learning is not just a psychological process that happens in splendid isolation from the world in which the learner lives, but that it is intimately related to the world and affected by it" (Jarvis, 2012, p.11).

**Learners** encompass not only students in formal degree programs but all individuals pursuing professional development, lifelong learning, and non-degree credentials, including academic faculty and staff, members of the public health workforce, and community partners. Students comprise a central position in the academic public health learning community.

**Lifelong learning** is a dynamic, generative, and self-determined process of both formal and informal study based on one's value and motivation for growth that fosters continuous development and improvement through the entire course of one's life, resulting in positive transformation, successful employment, and/or personal fulfillment (adapted from London, 2011, pp. 4-5).

**Non-degree credentials** are educational offerings that "exist at all levels of formal educational attainment and can be found in both educational and workforce training contexts" such as "certificates, certifications, licenses, apprenticeships, and bootcamps" (George Washington University, 2019, Definitions).

**Public health practice** is the "strategic application of…skills and expertise," which include conceptual frameworks, ethics, and values, "to prevent disease or injury and to improve the health of communities" (Public Health Nigeria, n.d., Paragraph 1).

**Social determinants of health** are "the conditions and environments in which people are born, live, work, play, worship, and age [that represent]...nonmedical factors affect[ing] a wide-range of health and quality-of-life outcomes and risks" (National Institutes of Health, 2023a, Paragraph 2).

#### APPENDIX B: GLOSSARY OF TEACHING AND LEARNING TERMS OF REFERENCE

**Structural racism and discrimination** refers to macro-level conditions (e.g., residential segregation and institutional policies) that limit opportunities, resources, power, and well-being of individuals and populations based on race/ethnicity and other statuses" (National Institutes of Health, 2023b, Paragraph 1).

*Transformative education* involves critical exploration, questioning assumptions, and is achieved through teaching and learning that engages and empowers learners. The goal of transformative education in public health is to prepare learners to make informed decisions and drive meaningful actions, both locally and globally, at individual, institutional, and community levels (Association of Schools and Programs of Public Health, 2023c).

**Transparency in Learning and Teaching (TILT)** is "a set of teaching strategies that focuses on making transparent to students how and why they are learning and engaging with course content in particular ways. TILT's goal is to provide more concrete support for student success, particularly among students who may come from lesser privileged academic backgrounds. The TILT framework encourages faculty to be transparent about their course and assignment design choices to provide answers to questions students might have about their coursework" (Indiana University Bloomington Center for Innovative Teaching and Learning, n.d., Paragraph 1).

*Universal Design for Learning (UDL)* is a "teaching approach that works to accommodate the needs and abilities of all learners and eliminates unnecessary hurdles in the learning process. This means developing a flexible learning environment in which information is presented in multiple ways, students engage in learning in a variety of ways, and students are provided options when demonstrating their learning" (Cornell University Center for Teaching Innovation, 2023, Paragraph 1).

#### **APPENDIX C:**

## INTERNAL VETTING PROCESS AND ACKNOWLEDGEMENT OF PARTICIPANTS

The *Transformative Approaches to Teaching and Learning* expert panel undertook an internal ASPPH vetting of a pre-final draft of this report between October 16-27, 2023.

Deidentified respondents included members of important ASPPH constituent groups, practice partner members of key ASPPH entities, and senior ASPPH staff. One hundred and ten individuals were invited to participate and 39% (43/110) responded to the survey, including 15/18 (83%) members of ASPPH's Education Advisory Committee, which has advisory oversight for this work. The completion rate was 100% for the first five required questions.

Acknowledgement and gratitude go to the respondents for the time they took to complete the survey and the valuable insights gained from their substantive comments.

Table 1: Summary of Responses to the Five Required Questions (without detailed, open-ended comments, which numbered 310)

#	Question: To what degree do you support Recommendation #?	Strongly Support	Support	Neutral	Combined Strongly Support + Support
1	Center our mission in education for civic engagement	62%	33%	5%	95%
2	Ground education in cross-sectoral collaborations and collective action to assess and address the determinants of population health	77%	18%	5%	95%
3	Foster authentic, diverse community partnerships as an essential element of the learning experience	74%	18%	8%	92%
4	Use active learning to prepare diverse, practice- ready professionals and support life-long learning to achieve health equity	74%	18%	8%	92%
5	Assure ongoing training in evidence-based frameworks, methods, and technologies for teaching, learning, and assessment of educational outcomes	85%	15%	0%	100%

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