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## Teaching about Cultural Competence and Health Disparities in an Online Graduate Public Health Course

Anuli Njoku, DrPH, MPH\*

Uchenna Baker, PhD, MEd<sup>†</sup>

\*Ferris State University, njokua@ferris.edu

<sup>†</sup>University of Puget Sound, uchennab@gmail.com

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# Teaching about Cultural Competence and Health Disparities in an Online Graduate Public Health Course\*

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## Abstract

The growing diversity in U.S. society encourages the need for culturally competent healthcare professionals to provide optimal services to a diverse population. This increasing diversity also brings greater awareness to health disparities among distinct subgroups of the U.S. population. Addressing health disparities in the USA will require a multidimensional approach from various sectors, including the field of education. Developing health disparities curricula can help cultivate conscious future health practitioners. Faculty development programs can be integral in equipping faculty to develop curricula on and teach students about health disparities. With a growth in online learning and in the number of adult learners within the health professions field, it is important to design online curricula to prepare students to engage with diverse populations with varied health-care needs. The purpose of this paper is to describe faculty efforts to teach and evaluate health disparities-related education in an online graduate course on cultural competence in Public Health practice.

**KEYWORDS:** public health education; health disparities curriculum; cultural competence; curriculum development; faculty development; graduate education

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School of Community Health Sciences  
University of Nevada, Las Vegas

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Anuli Njoku, DrPH, MPH, Ferris State University

Uchenna Baker, PhD, MEd, University of Puget Sound

*Corresponding Author:* Anuli Njoku, DrPH, MPH

### **ABSTRACT**

The growing diversity in U.S. society encourages the need for culturally competent healthcare professionals to provide optimal services to a diverse population. This increasing diversity also brings greater awareness to health disparities among distinct subgroups of the U.S. population. Addressing health disparities in the USA will require a multidimensional approach from various sectors, including the field of education. Developing health disparities curricula can help cultivate conscious future health practitioners. Faculty development programs can be integral in equipping faculty to develop curricula on and teach students about health disparities. With a growth in online learning and in the number of adult learners within the health professions field, it is important to design online curricula to prepare students to engage with diverse populations with varied healthcare needs. The purpose of this paper is to describe faculty efforts to teach and evaluate health disparities-related education in an online graduate course on cultural competence in Public Health practice.

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### **INTRODUCTION**

Cultural competence in health care has been described as “a developmental process defined as a set of values, principles, behaviors, attitudes, and policies that enable health professionals to work effectively across racial, ethnic, and linguistically diverse populations” (Joint Committee on Health Education and Promotion Terminology, 2012; p.11). Census data illustrate steady population increases in the USA and expectations that the nation will become increasingly diverse (U.S. Census Bureau, 2014). The growing diversity in U.S. society necessitates that health professionals understand the attitudes, cultural nuances, cultural beliefs and values, and health-seeking behaviors of various groups, to provide optimal services to a diverse population (Perez &

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Luquis, 2014). A “culturally competent” healthcare system has been defined as “one that acknowledges and incorporates—at all levels—the importance of culture, assessment of cross-cultural relations, vigilance toward the dynamics that result from cultural differences, expansion of cultural knowledge, and adaptation of services to meet culturally unique needs” (Betancourt, Green, Carrillo, & Ananeh-Firempong, 2003; p. 295).

Increasing diversity also brings awareness to health disparities among distinct segments of the U.S. population. Health disparities are differences in health outcomes among population subgroups that are linked to such factors as race, ethnicity, socioeconomic status, gender, geographic location, or other factors historically linked to discrimination or exclusion (U.S. Department of Health and Human Services, 2008). Certain population groups have been disproportionately affected by illness, disability and premature death, determined by factors such as race and ethnicity, socioeconomic status, gender, and geographic location (Meyer, Yoon, & Kaufmann, 2013). For instance, there are continuing disparities in mortality between African-Americans and Whites, illustrated by estimated life expectancy rates of 75.5 and 79.1 years, respectively (Arias, Heron, & Xu, 2016). Moreover, residents in predominantly minority communities continue to have greater risk and burden of disease when compared to members of the general population residing in the same county or state [Centers for Disease Control and Prevention (CDC), 2011]. Fair or poor self-rated health is reported by greater proportions of racial/ethnic minority groups (except Asian/Pacific Islanders), individuals with lower levels of education, those with lower annual income, and persons who are unemployed, when compared to non-Hispanic Whites, individuals with higher levels of education, individuals with higher income, and those who are employed (CDC, 2000). Geographically, rural U.S. communities have higher rates of morbidity and mortality and poorer health outcomes such as low birthweight, teen pregnancy, childhood obesity, preventable hospital stays, cancer, and diabetes incidence (Meit et al., 2014), and greater rates of poor health behaviors such as inadequate diet, physical inactivity, and smoking when compared to urban areas (Eberhardt & Pamuk, 2004; Hartley, 2004).

Eliminating health disparities is a leading Public Health priority in the U.S. (Healthy People 2020). Furthermore, addressing health disparities in U.S. society will require a multidimensional approach from diverse stakeholders, including academic institutions. One area for target is the current and future scientific medical workforce, as incorporating health disparities awareness courses into the curriculum can help cultivate conscious, culturally competent health practitioners to reduce health disparities (Rose, 2013; Benabentos, Ray, & Kumar, 2014). Cultural competency curricula may help reduce implicit bias among students and therefore help address health disparities (White-Means, Dong, Hufstader, & Brown, 2009; Blair, Steiner, & Havranek, 2011; Boscardin, 2015; van Ryn et al, 2015). As a result, many graduate programs in the health professions are integrating content on cultural competence and health disparities into their curricula (Shaya & Gbarayor, 2006; Jarris, Bartleman, Hall, & Lopez, 2012; Maldonado, Fried, DuBose, Nelson, & Breida, 2014; Cushman et al., 2015; Elias et al., 2017). This type of content is also emerging in health professions courses at the undergraduate level (Gutierrez & Wolff, 2017; Daugherty & Kearney, 2017; Batada, 2018). A search of the literature exclusively yields evaluations of online cultural competence and health disparities courses in disciplines outside of Public Health (Adam, 2008; Evans & Hanes, 2014). This suggests an opportunity to assess effect of such courses on Public Health students.

Preparing culturally competent health professionals is a critical component in addressing the needs of those facing health disparities. Thus, pedagogical approaches to health education must be comprehensive and far-reaching. Online education has the capacity to reach a broader scope of learners from diverse backgrounds and to broaden knowledge of health careers (Locatis et al., 2015). As such, a consideration for more education around cultural competence should be a critical component in online learning. With the increasing global outreach of online programs and courses, there is a great need to design and deliver online learning that can be engaging to a culturally diverse audience (Rogers and Wang, 2009). According to recent reports, a majority of online students are women, work full-time and average 32 years of age. More notably, students seeking to earn degrees in health related fields represent the vast majority of online learners (Friedman, 2018). It is expected that enrollment of adult learners who are over the age of 24 will increase at a faster rate than traditional-aged students through 2020 (Hussar & Bailey, 2011). With the health professions discipline having the fastest growth in online enrollment (Allen & Seaman, 2011), it is important that the online learning environment be designed to prepare students to engage with diverse populations with varied needs.

Knowles (1984) identifies four major principles that characterize the adult, online student population, one of which is that they accumulate an extensive depth of experience, which serves as a strong foundation for their learning. One might make the argument that these life experiences often contribute to unchallenged, or unidentified, assumptions. As such, there is an opportunity for online educators to challenge such assumptions by infusing aspects of cultural competence in the learning of their students. The purpose of this article is to describe faculty efforts to deliver and evaluate health disparities-related education in an online graduate course on cultural competence in Public Health practice.

## **METHODS**

This pilot study took place at a rural, predominantly white university in the Midwestern United States. The university is dedicated to training and educating future health professions leaders, and launched the Bachelor of Science in Public Health (BSPH) and Master of Public Health (MPH) degree programs in 2014. The programs focus on preparing and educating health professions students to work in underserved populations, largely due to the university's location in a rural area. Health disparities awareness content was integrated into an online graduate course on multicultural competence in Public Health practice that was taught in Spring 2017. The course was designed to provide students with the opportunity to explore complex concepts of how cultural diversity can affect delivery of Public Health services. The course also aimed to give students the opportunity to gain skills necessary to provide culturally competent Public Health services. The study design was a pre- and post- survey given to a cohort of 13 students. The course was taught asynchronously online over an 8-week period and is a required course in the MPH program.

### Faculty Training and Course Development

A group of Public Health faculty were assigned to develop MPH courses for the new Public Health program. To prepare for online teaching before arriving to campus, the faculty completed an 8-week online course designed to provide online professional development for online educators and to encourage collaborative exploration of new teaching strategies, learning principles, and competencies (MarylandOnline, 2014). Faculty learned effective online teaching strategies for

student success, including consideration of cultural differences that effect online learners, reflection as an active learning strategy to develop cognitive presence online, procedural scaffolding as a cognitive strategy to support learners' thinking, and active learning strategies such as reflection to develop cognitive presence online (Stavredes, 2011). Upon arrival on campus, faculty also attended a weeklong immersion workshop in which they outlined and organized course development, mapped program curricula, adopted program assessment measures, and implemented instructional design. Faculty also participated in several professional development programs at the university. Faculty development programs have been shown to improve knowledge, attitudes, and skills, and increase interest and motivation for teaching among faculty (Lancaster, Stein, MacLean, Van Amburgh, & Persky, 2014). From 2014-2015, faculty were enrolled in the university's new faculty transition program, and attended bimonthly workshops on such topics as "Creating Inclusive Classrooms", "Active Learning", and "The Inclusive and Engaged University Community". Some faculty received travel grants from the university's Faculty Center for Teaching and Learning to attend diversity-guided education conferences, and used knowledge gained to improving their teaching practices and curriculum.

Some faculty also participated in an interactive university workshop designed to encourage faculty to examine privilege, power, and identity in teaching and student learning and increase inclusive teaching practices. Subsequently, faculty applied insights from this workshop to create student reflective assignments that addressed health disparities-related course learning outcomes, and to deliver a regional conference presentation based on this workshop. Upon reflection, one faculty member felt that engagement with this particular faculty learning community really pushed them to examine privilege and unearned advantage in a new way and to critically explore how they, along with other faculty and students, may benefit or be adversely impacted by privilege in the classroom. As a result of the learning community, this faculty member reflected more frequently on the presence and absence of power and privilege in their life and the impact on their teaching and students' learning. This faculty member actively sought out resources that discussed or promoted awareness on this topic; continued conversations on this topic outside of the learning community with family, friends and colleagues; and actively pondered how to infuse such concepts into their coursework and activities. For instance, in a health promotion class, the faculty member incorporated YouTube videos and documentaries that discussed how factors like structural discrimination and racism result in racial and ethnic disparities in health outcomes.

In another workshop, faculty explored inclusion and diversity-related topics that affect educators and students. Faculty then conceptualized how social identity, intersectionality, power and privilege produce overlapping systems of disadvantage that contribute to health disparities. For some of the workshops, faculty were eligible to receive a professional development incentive (PDI) upon completion and submission of a final deliverable. Faculty could use PDI to advance their career goals related to teaching and student learning, such as conference attendance or equipment purchase. Some faculty presented their health disparities research at university conferences and forums. Some faculty also secured sponsored, external training in the form of an intensive summer workshop intended to increase the numbers of researchers engaged in health disparities research. One faculty member attended two sponsored national symposiums, which provided a forum for underrepresented early and mid-career researchers to network, receive professional development and training, and share research ideas. Insights gained from teaching

and learning conferences included information about professional development opportunities for faculty to read, think, study, and improve teaching; strategies to reflect on one's teaching; and recommendations for faculty to have colleagues observe their teaching and give feedback. Other knowledge gained included e-learning development for remote and distance learning to show faculty innovative ways to develop online courses embedded with videos, slides and commentary. One interactive conference session proposed unique classroom learning activities and encouraged participants to reflect on diversity, privilege, leadership and any progress made in the 21<sup>st</sup> century. Another conference session examined perceptual and substantive approaches to diversity, explored a diversity framework for affecting social change, and investigated the intersections between diversity and inclusion. Overall, such conferences and professional development opportunities helped faculty expand their professional network, enhance understanding about current issues related to the scholarship of teaching and learning, conceptualize new ideas to maximize course design and delivery and student learning, and develop intentional instructional approaches to raise health disparities awareness among students.

Concurrently, one of the faculty members participated in a Junior Faculty Fellows Program (JFFP), which provided support for this project. The JFFP initiative helped faculty in their second or third year at the university advance their teaching, scholarship or service goals and develop a research idea within an accountable and supportive learning community. JFFP participants were also encouraged to develop relationships with faculty at similar stages in their careers and disseminate their project findings and expertise with the university community. Upon project completion, faculty were eligible to receive a PDI towards activities to enhance their teaching and student learning. The faculty member who completed the JFFP chose to assess the effect of curriculum content on students' awareness about health disparities, to serve as a final deliverable for the program. Therefore, the JFFP supported the faculty member's efforts to implement instructional approaches and gather data on student learning about health disparities.

#### Course Design and Delivery

Integrating a variety of teaching styles and assessment methods, one faculty member made concerted attempts to infuse health disparities awareness content into the course (Table 1). Course learning outcomes, assessment methods, and learning activities were designed to build awareness of the presence of, contributors to, and consequences of health disparities within U.S. society (Perez & Luquis, 2014). Students also explored and applied theoretical models that help to explain cultural competence, including the Purnell Model for Cultural Competence (Purnell, 2002).

Table 1. Sample Course Learning Outcomes, Assessment Methods, and Lecture Topics and Objectives

<b>Course Learning Outcome</b>	<b>Assessment Method</b>	<b>Lecture Topic</b>	<b>Sample Lecture Objective</b>
1. Explain the concepts and issues relating to cultural diversity and competence in Public health Practice.	- Cross-Cultural Quiz - Online Discussion Board	- Implications of changing U.S. demographics	- Describe the selected characteristics of the major racial and ethnic groups in the United States.
2. Critically examine cultural and structural barriers in the practice of Public Health.	- Reaction Paper - Online Discussion Board	- Health disparities and social determinants of health	- Explain the social determinants of health and its impact on health disparities.
3. Explain the various biases that exist between underrepresented populations and their healthcare providers in healthcare encounters.	- Quiz	- Planning, implementing, and evaluating culturally appropriate programs.	- Discuss the influence of culture, heritage, family, religion, and spirituality, among other factors, on health behaviors and practices.
4. Analyze the factors that promote adherence to healthcare treatments among different cultures.	- Article Critique	- Culturally appropriate communication	-Analyze guidelines for effective communication and cultural competence in planning health education programs.
5. Synthesize strategies to develop a culturally competent health promotion and education program.	- PowerPoint Presentation	- Opportunities for cultural competency and health education	-Discuss strategies to integrate cultural and linguistic competence into health promotion and education programs to facilitate effective interactions with individuals or communities.

Various learner-centered teaching strategies and assessment methods were incorporated to stimulate further awareness of and interest in cultural competence and health disparities, promote student engagement, and create a welcoming learning environment. Learner-centered teaching in higher education encourages faculty to focus on what students learn rather than what faculty teach;

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emphasizes concepts of active learning, collaboration and emphasis on application; and motivates faculty to help students relate knowledge and skills acquired to their future professional and personal goals (Blumberg, 2008; Felder & Brent, 1999; Weimer, 2013). Faculty who practice learner-centered teaching emphasize problem-solving and critical thinking among students, serve as facilitators to guide student learning, encourage students to reflect on what and how they are learning, share power and give students choice and control in their learning, and foster classroom community and collaboration among students (Weimer, 2013). Moreover, when engaging online students, it is important to establish the community, or set the tone, support students into more challenging activities, and foster communication and interaction (Stott and Mozer, 2016). The course syllabus included information about the instructor's contact information, required course materials, academic and course policies, services for students with disabilities, rules of 'netiquette' (etiquette in an online course), grading scale, and assignment details and due dates. There were a variety of assignments that catered to different learning styles, including quizzes, discussion boards, reflective papers, and an evaluation of a peer-reviewed journal article. A Week 1 discussion board served as an icebreaker to allow students an opportunity to introduce themselves and state their expectations for the course. Icebreaker activities in an online course have been described as a safe way to establish communication and build community in a non-threatening manner (Conrad & Donaldson, 2012). Once the tone was set with the icebreaker, students were assigned a low-pressure, point-bearing assignment in the form of an online cross-cultural quiz. Students could take the quiz as many times as desired to achieve an optimal score, could see the correct answers upon completion, and had to submit a screenshot of the certificate received upon completion to receive credit for the assignment.

Moreover, teaching online can be transformative when instructors create a safe and inviting learning environment, encourage students to explore their own experiences and biases, and increase student awareness about inequalities and oppression (Meyers, 2008). In this course, students completed a self-exploration assignment in which they stated the cultural groups with which they identified, specified a cultural group that is salient to them, specified a culture they wanted to know more about, and proposed actions they would take to learn more about another culture. In another assignment, students wrote a reflective paper in response to a documentary on how social conditions affect population health (Aldeman et al., 2008), and discussed contributing factors to disparities in health status and health care utilization. Discussion board assignments required students to view documentaries that examined factors affecting the health of immigrants that come to and stay in the U.S. (Rios, Rodriguez, & U.S. Public Broadcasting Service, 2008), and the relationship between disempowerment, the uprooting of Native Americans' cultural traditions, and health outcomes (Fortier, January, & U.S. Public Broadcasting Service, 2008). After viewing the documentaries, students answered reflective questions and responded to discussion posts of at least two classmates. To encourage true reflection, students were not able to see their peers' posts until they posted their own first. In an online case study activity, students described cultural and religious factors to consider when developing breast cancer prevention programs among immigrant women (Perez & Luquis, 2014). Among the discussion board guidelines were that students had to provide constructive feedback that was respectful and courteous, reference peers by name when responding to posts, include their name at the end of their posts, and include relevant scholarly citations in their posts. Interaction is one of the most

21 Teaching about Cultural Competence and Health Disparities in an Online Graduate Public Health Course  
Njoku and Baker

essential elements of online instruction. Engagement can be learner-content, learner-teacher, learner-learner (Moore, 1989), and learner-interface (Hillman, Wills, & Gunawardena, 1994). Participation in this course was expected and was graded.

One of the lectures focused on lesbian, gay, bisexual, transgender, and questioning (LGBTQ) health disparities. Lecture objectives aimed to increase awareness of and sensitivity to health issues relevant to the LGBTQ population, and have students demonstrate cultural competence when working with the LGBTQ population (Perez & Luquis, 2014). Students were assigned a research article that examined demographic and psychosocial factors that determine the mental health of sexual minority groups (Bariola et al., 2015). Another assignment required students to develop a culturally competent health education program for a health behavior affecting a specific population group. This assignment was in the form of a narrated PowerPoint presentation, a flipped classroom component that can improve student performance (Della Rata, 2015). Students were also instructed to complete a peer review assignment where they had to evaluate at least three of their peers' presentations. Evaluation of another student's work is a particularly effective way to improve student writing (Angelo and Cross, 1993). A summative assignment included having students select a scholarly article of their choice that focused on a health problem contributing to health disparities within a particular population group. Overall, these and other educational activities were designed to create a safe and welcoming online learning environment, and enhance student awareness and engagement (Gilboy, Heinerichs, & Pazzaglia, 2015).

#### Data Collection

Ethical approval for the study was granted by the university's Institutional Review Board (ID #160401). Subsequently, students completed pre- and post-surveys to assess the effect of intentional instructional approaches on their health disparities knowledge and attitudes. Surveys were distributed online eight weeks apart, at both the beginning and the end of the Spring 2017 semester. The anonymous survey included an informed consent form, which provided the project title, contact information to send any questions or concerns, a statement that participation was voluntary, and assurance that nonparticipation would not affect the student's relationship with the university. The survey included eight questions to gauge level of agreement through a 5-point Likert scale (1=strongly agree, 5=strongly disagree). Survey questions were developed based on course learning outcomes, due to lack of validated surveys in the literature. The survey collected sociodemographic information on gender, age, year in school, area of residence, employment status and academic major. To facilitate analysis, the age variable (25-64 years) was dichotomized at the midpoint of the scale. Students were also asked to complete online evaluations to rate instructor and course elements (IDEA, 2017). Additionally, a Department Head and tenure committee member was granted access to the online course module and completed a customized observation instrument that evaluated the instructor in areas such as teaching style, student engagement, preparation, and organization.

#### Data Analysis

Study data were coded and entered into the Statistical Package for the Social Sciences (IBM Corp. Released 2016. IBM SPSS Statistics for Windows, Version 24.0. Armonk, NY: IBM Corp.). Descriptive statistics, including frequencies and means, were generated to compare pre- and post-survey scores and analyze demographic characteristics. Paired t-tests were used to assess

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change in students' responses to questions between the pre- and post-survey. One-way analysis of variance (ANOVA) was used to analyze data from independent variables with three or more levels. Level of significance was set at  $p < 0.05$ .

## RESULTS

Twelve students completed pre- and post-surveys, yielding a 92% completion rate. Regarding sociodemographic characteristics, students in this sample were all female, primarily between the ages of 25 to 44 years, rural residents, Public Health academic majors, and employed full-time (Table 2). Paired t-tests revealed statistically significant positive changes in students' pre- and post-survey scores for several survey items (Table 3).

Table 2. Demographic Characteristics of Participants at Post-Survey

Variable	N (%)
Age	
25-44 years	9 (75.0)
45-64 years	3 (25.0)
Gender	
Women	12 (100.0)
Year in School	
Graduate Student	12 (100.0)
Area of Residence	
Urban Area	2 (16.7)
Rural Area	8 (66.7)
Suburban Area	1 (8.3)
Missing Data	1 (8.3)
Employment Status	
Employed Full-Time	10 (83.3)
Employed Part-Time	2 (16.7)
Academic Major	
Nursing	2 (16.7)
Public Health	10 (83.3)

Table 3. Paired Sample T-Test Mean Scores for Students' Pre- and Post-Test Surveys

Survey Question	Mean Baseline Survey Score (1=low, 5=high)	Mean Follow-Up Survey Score (1=low, 5=high)	Significance (2-tailed)	95% Confidence Interval	
				Lower	Upper
1. I have an interest in health promotion and education.	4.80	4.67	.584	-.367	.633
2. I have discussions with others about topics related to health promotion and education.	4.00	4.42	.233	-1.077	.243
3. I understand what the term 'health disparities' means.	4.00	4.82	<b>.000*</b>	-1.087	-.550
4. I am able to explain the relevance of health disparities to planning, implementing and evaluating a health promotion program.	3.60	4.58	<b>.001*</b>	-1.524	-.443
5. I am able to discuss strategies health promotion programs can use to reduce health disparities.	3.60	4.58	<b>.003*</b>	-1.593	-.374
6. I am able to discuss the role of theory in understanding health behavior and disparities in health status.	3.20	4.25	<b>.012*</b>	-1.845	-.255
7. I am able to examine the role of collaboration and advocacy in developing effective public health interventions.	3.70	4.33	.057	-1.289	.022

Survey Question	Mean Baseline Survey Score (1=low, 5=high)	Mean Follow-Up Survey Score (1=low, 5=high)	Significance (2-tailed)	95% Confidence Interval	
				Lower	Upper
8. I would like to explore issues related to health disparities in my education, research, or practice.	4.30	4.58	.336	-.883	.316

\*Statistically significant ( $p < 0.05$ )

Analyses also yielded statistically significant differences in students' health disparities awareness according to age, area of residence and employment status. At follow-up, there were statistically significant higher mean scores among students ages 25-44 years old compared to the those ages 45-64 years old ( $p = 0.001 < 0.05$ ). Specifically, there were statistically significant higher mean scores for each survey item among students ages 25-44 years old at follow-up ( $p = 0.002 < 0.05$ ). There were no significant differences between the baseline and follow-up scores among students ages 45-64 years old ( $p = 0.472 > 0.05$ ). Additionally, there were statistically significant higher mean scores from baseline to follow-up survey among both Urban residents ( $p = 0.008 < 0.05$ ) and Rural residents ( $p = 0.016 < 0.05$ ), but not among Suburban residents ( $p = 0.171 > 0.05$ ). There was also a statistically significant increase in mean scores from baseline responses to follow-up responses, among those employed full-time ( $p = 0.004 < 0.05$ ).

#### Course Evaluations and Student Reflections

The instructor observed that various teaching modalities encouraged learning, increased participation and promoted engagement among students. Anonymous online course evaluations, which were administered in addition to the pre- and post-surveys, yielded a 100% completion rate. On the evaluations, students' summary assessment of teaching effectiveness resulted in an overall course rating of 4.6 out of a 5.0 scale. Students provided ratings (out of a 5.0 scale) on different items for instructor assessment for the course, including: 'related course material to real life situations' (4.92), 'helped students to interpret subject matter from diverse perspectives (e.g., different cultures, religions, genders, political views)' (4.85), 'encouraged students to use multiple resources to improve understanding' (4.77), 'demonstrated the importance and significance of the subject matter' (4.77), and 'encouraged students to reflect on and evaluate what they have learned' (4.77). Overall, students provided quantitative and qualitative responses in the course evaluations, referring to teaching styles used and course content.

Students also gave course feedback through reflective assignments, which demonstrated self-examination related to health disparities-related course content and perceived insights gained from the course (Table 3). Furthermore, feedback from teaching observations were positive. Comments provided an opportunity to discuss feedback with the Department Head and members of tenure committees.

Table 3. Excerpts from Students’ Reflective Assignments (Cultural Diversity & Competence in Public Health Practice course)

	<b>Most Important Concept Learned</b>	<b>Why Concepts are Important to You</b>	<b>How You Plan to Use Concepts</b>
<b>Student 1</b>	“I feel the three most important concepts I have learned in this course are culturally appropriate materials and health literacy, cultural competence, and health disparities.”	“The whole purpose of community education is to change behavior for the best health outcome. If the material is not appropriate for the group or the health educator doesn’t understand the group, there may be little to no change in the health behavior. Health disparities exist everywhere and affect people that you may not even think of.”	“My goal is to become a community health educator, because of this class, I am more aware of the importance of health literacy and how to develop culturally appropriate materials. This class has taught me the various factors that pertain to health literacy and I realize now that is more than just language”.
<b>Student 2</b>	“The first concept I learned from this course is cultural competency. The second concept I learned was the importance of appropriate cultural communication. The third concept I learned is the importance of health literacy with the aging population.”	“These concepts are important to me as more diverse students are attending our University, and dental hygiene program.”	“I could use this knowledge in my dental career with communicating with diverse students and patients in private practice.”
<b>Student 3</b>	“There were several concepts within this course that I found to be valuable. The importance of cultural and linguistic competence, communication within health promotion programs, and the concepts around social	“Understanding the different cultural backgrounds and how to communicate within them is key in enhancing trust and establishing a valuable relationship to my patients.”	“Moving forward within my career, I hope to be able to work outside of the clinical practice...and utilize my skills to help create awareness and opportunities for individuals (especially children and maternal populations) to have access to...programs and

	<b>Most Important Concept Learned</b>	<b>Why Concepts are Important to You</b>	<b>How You Plan to Use Concepts</b>
	determinants are what I found to be the most important. These three areas have provided me insight into being more aware of different backgrounds and to not pass judgement or to make assumptions.”		educational opportunities.”
<b>Student 4</b>	“The importance of cultural competence in public health, how health disparities affect different ethnic and cultural groups, and what factors contribute to health disparities”.	“These concepts are important to me, because I would like to have a career in public health...I can take this information with me to understand how I can help people with different cultures and make them feel comfortable while receiving health care in our country.”	“I plan to apply these concepts to develop new programs to promote better health care for less fortunate communities and groups of people.”
<b>Student 5</b>	“One of the most important concepts I have learned in [course] are the implications of changing demographics in the US for healthcare providers. Another important concept I have learned in this course are the social determinants to health. One last important concept I have learned from this course is the use of theoretical models such as the PEN-3 model, and Purnell Model. ”	“Changing demographics proves a need to become more culturally competent in order to reach specific populations and provide quality care. It is important for me to understand the social determinants of health among various population groups in order to create an effective intervention program for those groups.”	“I plan to use all of these concepts moving forward when considering intervention planning, implementing, and evaluation strategies.”

	<b>Most Important Concept Learned</b>	<b>Why Concepts are Important to You</b>	<b>How You Plan to Use Concepts</b>
<b>Student 6</b>	“The most important concepts I learned are that health professionals should focus on social issues instead of only diet and exercise, the Latino Paradox, and health disparities. I also really enjoyed learning about the different ethnic and racial groups in the United States.”	“As someone who studied dietetics in college, I always thought that diet and exercise are the keys to good health, but health is more complex than that. The idea that social issues should be addressed before addressing diet and exercise challenges my basic belief that education solves everything.”	“I will use the fact that social issues should be addressed before addressing diet and exercise in all future child obesity interventions I work on or develop.”
<b>Student 7</b>	“The three most important concepts that I have learned through taking this course is, the importance of utilizing a [populations’] religion integrated with their healthcare, the encompassing thought process of health care providers dealing with a variety of cultures and maximizing health and the application of socioeconomic status and health.”	“These topics of religion, socioeconomic status and understanding different cultures are important to me because not only do these concepts contribute to my degree in Public Health but they are vital to communicating to individuals in everyday life. As stated before, religion [has] always fascinated me and through this course I have learned certain tidbits of information pertaining to certain groups.”	“I plan to use these skills that I have gained not only in my future career but also in everyday life. I feel that at times, I have a tendency to become wrapped up in my own beliefs rather than trying to understand the other side.”
<b>Student 8</b>	“The first item that I felt was important that I learned in this course is how you can predict a life expectancy based on the resources you have available. The second item I felt was important was how you need to research and investigate cultures you are working with to	“This is important to me because I will be more aware and conscious of this when giving care to my patients. I will consider this not only with my patients but also in everyday life. At the same time, you can’t assume everyone in one culture is the same with the same values and beliefs. We	“Treating everyone the same will not have a positive effect for their health. I will treat my patients as individuals and give them the time they need to provide holistic care.”



	<b>Most Important Concept Learned</b>	<b>Why Concepts are Important to You</b>	<b>How You Plan to Use Concepts</b>
	identify their needs, provide proper care and connect with them. The third item I felt was important was don't assume anything with a culture."	need to talk to our patients and identify their individual needs, beliefs and values."	
<b>Student 9</b>	"Three important concepts I learned through this course is to design culturally competent programs along with being culturally competent myself. Another concept I learned was about the cultural assessment framework and the PEN-3 model both used to help design health education programs. A third concept that I was reminded of was an individual can identify with any group they feel comfortable with and because of this as a health educator it is imperative to [be] accepting and competent of all cultural [groups] and open to adapting a program to best suit that particular group."	"These concepts, though very similar to each other, are important to me because I have a strong desire to help create programs to reduce the prevalence or ideally eliminate childhood obesity."	"...being culturally competent in creating a program that could be applicable within the entire state of Michigan would be important."
<b>Student 10</b>	"This course has really made me realize how many factors are involved in becoming a culturally competent	"With the diversity of the United States, its communities, and its schools growing rapidly,	"Working at a university, I work with a diverse group of students on a regular basis. I believe I can employ much of what

	<b>Most Important Concept Learned</b>	<b>Why Concepts are Important to You</b>	<b>How You Plan to Use Concepts</b>
	health provider. Understanding the culture, heritage, family values, religion, and spirituality of different racial and ethnic groups truly is crucial in being able to achieve the best possible health outcomes. I also gained a great deal of knowledge regarding health disparities. I did not realize the extent of health disparities in the United States. The extent of the challenges that immigrants face after migrating to American is another concept discussed in the course that made an impact.”	this information is increasingly important.”	I’ve learned in this class immediately to my current job.”
<b>Student 11</b>	“One important concept that I have learned is that health educators must be aware of differences existing between and among racial and ethnic groups in the U.S. to decrease adverse health consequences and help promote health equity. I was also unaware of the different factors that contribute to health disparities among individuals for example religion, sexual orientation, SES, age,	“The three items listed above are important to [me] because I need to understand and learn that differences exist among people and among other racial groups that are different from my own.”	“I plan to use the concepts that I have learned in this class to promote health equity and to provide culturally appropriate care to individuals.”

	<b>Most Important Concept Learned</b>	<b>Why Concepts are Important to You</b>	<b>How You Plan to Use Concepts</b>
	mental health, and geographic location. I have also learned that...to address the role of culture in disease prevention and health promotion we need to utilize the Purnell Model for Cultural Competence or the PEN-3 Model.”		
<b>Student 12</b>	“The three important concepts I learned during this course were 1) The significance of cultural competency and its importance to healthcare organizations and public health education, 2) Recognizing the need for cultural and linguistic competence and inspecting cultural factors in the planning and implementation of culturally appropriate program, and 3) The usage of guidelines for effective communication and cultural competence in planning health education programs.”	“As a health professional, I can apply these concepts to real-world practice. Additionally, I understand more deeply the importance of providing primary prevention programs for older adult populations, and cultural competence programs for aging minority older adults.”	“Before I plan any intervention in any community, I will determine the needs for cultural and linguistic competence. I will use specific guidelines for effective communications in health education programs. I will examine cultural factors in the planning and implementation of culturally appropriate program in our community.”
<b>Student 13</b>	“The first concept I found important was, you must consider culture when creating an education program. What works for one	“These concepts are important to me because I am a Public Health Nurse. I mostly work with mothers and infants. However, these mothers	“From here on out, I plan to continue educating myself on effective and culturally appropriate education methods to be

	<b>Most Important Concept Learned</b>	<b>Why Concepts are Important to You</b>	<b>How You Plan to Use Concepts</b>
	culture may not be effective in another. The second concept I found important was, not only does culture and race play a role in education but age does as well. The third concept I found important was, African Americans have a higher risk for preterm birth over whites.”	are from different cultures, races, and age groups. I need to know how to educate them in a way that is effective. Also, with the population I work with, I see a lot of preterm births. It was good for me to research the risk factors for preterm birth.”	more effective in my professional role.”

Themes

After data analysis, the following sub-themes emerged:

*Value for diversity and cultural competence:* Among participants, there seemed to be a value for learning about different cultures, developing cultural competence, and applying insights to current practice. Through statements about, “*the implications of changing demographics in the US for healthcare providers*”, the “*thought process of health care providers dealing with a variety of cultures*”, and how “*health educators must be aware of differences existing between and among racial and ethnic groups in the U.S.*”, there appeared to be an interest in healthcare professionals understanding the populations they are working with and a desire to better understand how people get to where they are.

*Challenge of pre-existing beliefs:* Responses suggest that teachings encouraged participants to challenge their pre-existing notions. Comments about a previous “*belief that education solves everything*”, on how “*I need to understand and learn that differences exist among people and among other racial groups that are different from my own*”, that “*I always thought that diet and exercise are the keys to good health, but health is more complex than that*”, and on how “*you can’t assume everyone in one culture is the same with the same values and beliefs*” indicate that students took ownership of their learning, thought critically, and examined pre-existing assumptions they held.

*Desire to apply knowledge to practice:* Participants came from various professions, including Dental Hygiene, Nursing, and Public Health. Reflections suggest that participants had plans to apply new knowledge and skills to program development and effective communication. This was evidenced in comments that “*I am more aware of the importance of health literacy and how to develop culturally appropriate materials*”, on “*communicating with diverse students and patients in private practice*”, and on a “*plan to apply these concepts to develop new programs to promote better health care for less fortunate communities*”.

**DISCUSSION**

To keep online students engaged and feeling part of a learning community, a faculty member used group discussions, case studies, interactive lectures, and multimedia materials to teach about health disparities in an online graduate public health course. Assessment methods were also designed to align with course learning outcomes. Moreover, course goals were connected to the ultimate objective of increasing motivation for learning and satisfaction with the course among students. This can help with student retention, and is critical because this course is within a newly launched Public Health program at a rural university. This university's program curriculum concentrates on the special population health needs of rural communities. Thus, it is important to highlight rural health disparities in our courses. For example, the incorporation of a lecture on LGBTQ health disparities in this course is meaningful because LGBTQ health disparities may be heightened and stigmatized in rural populations (Whitehead, Shaver, & Stephenson, 2016). Efforts to improve curriculum design and delivery can help meet program goals of preparing students to address the needs of underserved populations. Various learner-centered teaching strategies were incorporated. Learner-centered teaching also acknowledges the importance of cognitive strategies such as reflective writing and self-assessments to increase students' self-efficacy, empower them in their studies, and promote deeper learning and greater academic achievement (Svinicki, 2004; Young & Fry, 2008).

Faculty development programs were instrumental in inspiring and supporting a faculty member's efforts to employ intentional instructional approaches and collect data on student learning about health disparities. Successful development of faculty can be described as an ongoing, intentional and meticulous process (Guskey, 2000). Opportunities to enhance faculty teaching and student learning can encourage faculty to stimulate critical thinking, active learning, problem-solving, and collaboration among students (Weimer, 2013). Furthermore, some faculty shared insights gained from professional development programs with the university and larger community at forums such as a new faculty orientation, a health professions best practices day, a university conference on aging, and a regional diversity-guided education conference. This potentially widened the impact of the faculty development programs. Also noteworthy is that some faculty participated in professional development programs that aimed to enhance the careers of underrepresented junior and mid-level faculty, and encourage the conduct of health disparities research. Such programs have been shown to increase the capacity for faculty to engage in health disparities research, scholarship and practice; these programs have also helped underrepresented faculty advance their careers (Daley, Broyles, Rivera, & Reznik, 2009; Berget et al., 2010; Butler et al., 2017).

The increase in mean scores for several survey items from pre- to post-survey was noteworthy and suggested course content promoted an increased awareness of health disparities among students. Study results showed that there was a statistically significant increase in scores among students age 25-44 years old, which is notable when considering adult learners over age 24 represent one of the fastest growing age group of students (Hussar & Bailey, 2011). There were also statistically significant increases between the baseline and follow-up scores among urban residents, rural residents, and full-time workers. Interestingly, there was a slight decrease in reported interest in health promotion and education, from pre-survey to post-survey. However, the result was not statistically significant. A possible theory for the slight decrease in scores may

be that students possibly felt overwhelmed or disheartened by the course material. One way to temper this may be to highlight successful initiatives to address health disparities.

Furthermore, IDEA score averages in the course were positive and verified effectiveness at achieving course objectives and learning outcomes, and promoting a learner-centered environment. Higher ratings indicate greater student progress and more positive student experience (IDEA, 20017). The IDEA evaluation scores also suggest the instructor successfully utilized instructional strategies. It is important to promote student satisfaction with learning and school as program graduates prepare to advance their careers. In their reflective assignments, students demonstrated keen introspection, and reported new knowledge about health disparities. Reflection entries indicated that students were receptive to the opportunity to learn about, and consider solutions to address health disparities. Reflective assignments have been shown to influence students' self-awareness and motivate their questioning regarding pre-conceived notions (Isaac, Behar-Horenstein, Lee, & Catalanotto, 2015).

Despite the positive impact of the course on student knowledge and attitudes about health disparities, this study had some limitations. We must be cautious with any conclusions drawn from this small pilot study. First, we lacked a control group and had a small sample size, as enrollment in this course was capped at 20 students. Our sample contained only females. Therefore, results may not be generalizable to larger populations. This study can be repeated on a larger, more diverse sample to determine if instructional strategies achieve similar effects. Second, selection bias may be an issue because this course is required for graduate Public Health majors at the university. Students may have been more interested in taking this course as a result. Third, this course was delivered by one faculty member and in one section of the course, potentially biasing the findings. Nonetheless, the statistically significant changes in students' health disparities-related perceptions suggest a positive effect on health professions students' knowledge and attitudes. The survey yielded a high response rate and student feedback regarding the course experience was positive. Although findings are from one Public Health program at a rural Midwestern U.S. university, they may offer some interesting insights and suggest need for additional research.

#### Future Directions

Future pedagogical directions can also include incorporating community-based participatory research and academic service learning to promote student engagement in the community, provide reflection opportunities on contextual factors affecting health, apply course concepts to real-world settings, and enhance cultural competence among students (Metcalf & Sexton, 2014; McElfish et al., 2015; Sabo et al, 2015). We should also consider collaborative efforts with other health profession disciplines (e.g. Nursing, Pharmacy, Dental Hygiene) as well as non-health disciplines (e.g. Education, Social Work) to share resources and develop health disparities-related course content and collective projects, to assemble a wider set of future stakeholders to commit to eliminating health disparities (Benabentos et al., 2014). Instructors should also consider mid-semester formative assessments of students' learning experiences within such online courses. For instance, student impediments in online learning may include uneasiness about a shift from traditional lecture format to narrated lectures, experience navigating the online classroom, and the volume of preparation required outside of class (Crews & Butterfield, 2014). Mid-semester assessments may allow instructors to identify and address any student concerns

during the course. Moreover, teaching online can also be an adjustment for the instructor, as it may require a shift from presenter to facilitator. It may take considerable time to develop learning activities to engage students, and students may have difficulty completing the necessary preparation for these activities (Simpson & Richards, 2015). Therefore, instructors should also assess effect of the course on their personal and professional development, and apply lessons learned into future teachings of the course. While this paper focuses on one faculty member's application of development programs to enhance teaching and student learning, future efforts should examine the experiences of more faculty members within the program.

## CONCLUSION

In summary, disparities in healthcare outcomes is one of the crucial current Public Health concerns (Benabentos et al., 2014). Furthering awareness of factors contributing to healthcare disparities can also allow students to contextualize current societal issues that affect health. Developing culturally competent learners and increasing their awareness of health disparities may help to alleviate this issue. Awareness of health disparities may encourage students to consider addressing these issues in the educational, research or practice pursuits (Vela et al, 2010). Implications for teaching about health disparities in online public health education include that it promotes applied learning, a more effective learning experience, and appreciation for cultural diversity that is crucial to developing world-class public health leaders (Banerjee and Firtell, 2017). Additional research is encouraged on other online undergraduate and graduate Public Health programs to expand on these findings about the benefits of promoting health disparities awareness among online college students.

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39 Teaching about Cultural Competence and Health Disparities in an Online Graduate Public Health Course  
Njoku and Baker

Young, A. & Fry, J.D. (2008). Metacognitive awareness and academic achievement in college. *Journal of the Scholarship of Teaching and Learning*, 8(2), 1 – 10.