

Authentic Assessments Through the Lenses of Diversity, Equity, Inclusion, and Justice in a Fully Online Course

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Abstract: The social isolation resulting from the 2020 global pandemic posed both challenges and opportunities in higher education. One of the greatest opportunities has been the chance to foreground the dimensions of diversity, equity, inclusion, and justice (DEIJ). As online course enrollments in postsecondary programs increase, educators, researchers, and learning design practitioners need to identify strategies to implement an inclusive learning environment in online learning programs. The purpose of this article is to describe how we, learning designers, conceptualized the DEIJ dimensions and reflected them in our design decisions with the use of technology. Using the DEIJ lenses, we focus on the design of authentic assessments with the use of technology, such as available features within the Canvas learning management system and external tools.

Keywords: instructional design, DEIJ lenses, authentic assessments, learning technologies, online learning

What Are Diversity, Equity, Inclusion, and Justice?

The issues of equity and diversity in education were discussed in the instructional design and technology (IDT) literature prior to the 2020 global pandemic. In outlining the five pedagogical goals of constructivist learning environments, Duffy and Kirkley (2004) foregrounded the importance of diversity and inclusion when conceptualizing reflective experiences to support knowledge transfer and collaborative learning, particularly in online environments. In this context, they argued, diversity as a construct informs design decisions that address learners' engagement and cognitive preferences. In discussing the challenges of supporting meaningful discussion in online environments, Bonk et al. (2004) suggested that true learning communities require membership, a sense of identity, and shared knowledge. They proposed that the inclusion of community members in the collaborative process is a critical component in establishing online communities. Subramony (2004) brought to the attention of IDT scholars and educators their systemic lack of consideration of cultural diversity among learners when researching and implementing instructional solutions. The author stressed that ignoring the unique voices and experiences of learners from different cultural backgrounds further distances minority populations from the potential of technology.

This is especially true for online learning environments, where technology is vital to providing students with access to learning resources and activities. Lin (2007) investigated the ethical issues that instructional design technologists and designers have faced, highlighting issues associated with diversity and inequality. In the context of Lin's study, diversity and inequality mainly refer to the balance of power and privilege between two groups—those who have the privilege of access to necessary resources to succeed and those who do not. Lin identified diversity as a major ethical issue in instructional design and training and suggested that when designing instructional solutions, it is important not only to make sure that the chosen technology and resources are understandable but

also that they are relatable to learners, which calls for consideration of and respect for learners' diverse backgrounds.

Further, Sulecio de Alvarez and Dickson-Deane (2018) stressed that for learners to feel successful while learning with technology, it is essential that they understand the purpose of the task and the role they play in completing the task. The authors specifically pointed out that when developing and integrating technology, designers should be mindful of the learners' cultural context. It is important to help learners identify themselves with what they are learning and have a sense of agency over their learning with the use of technology. That is, when designing learning experiences and integrating technology, it is essential for instructional designers to consider cultural values and provide room for technology adaptation in a way that best fits learners' cultural context and the values of the community where learning is situated. To this end, it is important to have certain competencies, such as cultural competence, which is defined as the teacher's ability to help students understand and appreciate their culture of origin while gaining knowledge about other culture (Ladson-Billings, 2014). For instance, Ladson-Billings (2014) emphasized that it is essential for teachers/instructors to have cultural competence to be able to help students appreciate their own cultural origins and differences in a learning environment. Cultural competence manifests itself in teachers'/instructors' ability to make learning relevant for students through facilitating and nourishing skills that help them identify, analyze, and solve problems in real-life contexts. Considering students' cultural origins and background is one of the most important elements when designing equitable and inclusive learning.

Designing equitable and inclusive learning experiences does not stop at considering only one particular element; it calls for a multifaceted, deep, and thoughtful perspective. We found two theories, critical theory and critical race theory, of special importance when reflecting on and conceptualizing diversity, equity, inclusion, and justice (DEIJ). Critical theory allows scholars and practitioners to account for power differentials and view power as it is shaped in human cognition and reflected in a person's speech and action (Habermas et al., 1984). Thus, through the lens of critical theory, scholars and practitioners are able to see who among learners has power over others in terms of better access to resources and, in general, to understand the learners' contexts. Critical theory found its application in education because it serves as a framework that challenges dominant ideologies and taken-for-granted assumptions and biases (Wang & Torrisi-Steele, 2015). It has been applied in many other educational disciplines, including music education (Regelski, 2005), engineering education, (Clariss & Riley, 2012), pedagogy, and feminist pedagogies (Wang & Torrisi-Steel, 2015). Specifically, Wang and Torrisi-Steele (2015) discussed the importance of using critical theory in online education. They stressed that critical theory serves as a platform that educators can use to examine their beliefs and assumptions about teaching approaches and practices when teaching online. Using critical theory, educators are able to better understand and to be more aware of their current practices and beliefs and are encouraged to make changes to their existing online teaching practices to have a positive impact on their students' learning experiences. Similarly, Yeaman et al. (1994) highlighted the importance of critical theory in analyzing the ethics of educational technology as social responsibility. They suggested educational technologies should have the qualities of "being ethical and more humanizing" (Yeaman et al., 1994, p. 12).

Similarly, critical race theory emphasizes the importance of valuing the voices, experiences, and perspectives of underrepresented and marginalized groups of people through challenging the dominant ideology (Solórzano & Yosso, 2002). Critical race theory serves as a powerful pedagogical strategy that aims to:

account for the role of race and racism in education and works toward the elimination of racism as part of a larger goal of opposing or eliminating other forms of subordination based

on gender, class, sexual orientation, language, and national origin. (Solórzano & Yosso, 2002, p. 25)

More recent studies (Davis et al., 2021; Rodriguez et al., 2022) have highlighted that there is still a need in research and practice for creating equitable and inclusive learning environments, and that both critical theory and critical race theory play a crucial role in encouraging learning designers and educators to reconsider their practices. For instance, Davis et al. (2021) pointed out that including different races and ethnicities and being mindful of them not being stereotypes is critical not only in learning activities but also when selecting images for learning materials, such as PowerPoints, to avoid racism and misrepresentation of African Americans, Asians, and other races. Rodriguez et al. (2022) really brought to the forefront the importance of going beyond raising awareness of racism to also consider actionable strategies and tactics that could help make progress toward tackling years of oppressive and discriminatory practices. As both critical theory and critical race theory can serve as a powerful tool for examining, acknowledging, and recognizing one's privilege, implicit biases, and assumptions, both theories are crucial in encouraging a change in educators' and designers' perspectives, thinking, and wrong assumptions that find their reflection in design and teaching practices. Thus, we as designers find it is of great importance to consider and apply both theories when designing with the DEIJ lenses in mind.

As practicing learning designers, we also believe in the “community of practice” approach (Lave and Wenger, 1991), and so we referred to the work of other learning designers when conceptualizing the DEIJ dimensions. Notably, learning experience designers from the Center for Academic Innovation at the University of Michigan have been using the DEIJ lenses as a design tool when designing equitable and inclusive learning experiences (Chandler et al., 2020). Specifically, they conceptualized the DEIJ lenses as (1) addressing social inequality; (2) finding common ground among individuals coming from different backgrounds; (3) including multiple perspectives; (4) valuing individuals; and (5) recognizing the impact of power and privilege (Lachheb & Quintana, 2021). Therefore, when designing with equity and inclusion in mind, it is critical to account for historical, cultural, and socioeconomic backgrounds as well as dimensions of power and privilege among learners.

What Do Diversity, Equity, Inclusion, and Justice Mean to Us?

As learning design practitioners, it is important to clearly operationalize and conceptualize the DEIJ dimensions. Thus, informed by our literature review, we defined the dimensions and identified our design steps as presented in Table 1. Please note that the provided examples of design and authentic assessments are based on the learning context of an undergraduate public health communication course. From our perspective, design is situational and not universal (Boling & Gray, 2014; Nelson & Stolterman, 2014), and thus the design of learning experiences is context bound. Therefore, how the DEIJ dimensions can be enacted through design and pedagogy depends on a given discipline and course (Higbee et al., 2010). Our goal in this course was to organically integrate the DEIJ dimensions into content, activities, and assessments, rather than having the DEIJ unit as a stand-alone learning module.

Table 1. Definitions of the DEIJ dimensions and their manifestation in design and teaching.

Dimension	Operationalized definition	Enacted through design by...	Examples of authentic assessment through the DEIJ lenses with the use of technology
Diversity	Recognizing, respecting, and considering differences that learners bring into the learning space (e.g., cultural, learning, gender, social status)	<p>Presenting material from different sources to show different experiences, perspectives, and standpoints</p> <p>Offering reflection opportunities and safe learning space for students to examine their biases and stereotypes that can stand in the way of inclusion of people from diverse backgrounds</p>	<p>Scenario-based simulations and discussions centering on real-life issues related to inclusion, diversity, and equity with reflective questions and the use of the discussion board tool or external tools such as Course Networking. Course Networking (CN Post) is a tool where students can form an online learning community for social discussion and engagement.</p> <p>To stimulate discussion around the DEIJ lenses, students are offered reflective questions and prompts, as well as scaffolds in the form of DEIJ evaluation rubrics</p>
Equity	Providing learning opportunities to students coming from diverse backgrounds that help them bring out the best of their abilities	Providing assessment options, formative assessment, mentoring opportunities, instilling growth mindset	Audience analysis assignment prior to designing a public health speech with the consideration of diverse audiences with the use of interactive mapping tools and databases
Inclusion	Creating an inviting and welcoming learning environment where learners, regardless of their race, origin, social status, or learning differences, feel that they belong and are	Providing welcoming introductory videos, introductory forum for students, instructor feedback to every learner, greeting and welcoming the class, including learning material representing	

Dimension	Operationalized definition	Enacted through design by...	Examples of authentic assessment through the DEIJ lenses with the use of technology
	part of the learning community	diverse populations, their experiences, and standpoints	Communication channels analysis with the consideration of diverse audiences with the use of interactive mapping tools, databases, and social media
Justice	Recognizing social injustice, power, and privilege, and challenging dominant ideology	Providing learning materials that discuss social injustice, power, and privilege Providing mentoring opportunities to help students analyze and reflect on their behavior to avoid social injustice Offering analysis of real-life cases and scenario-based simulations	Multilevel public health communication campaign for a diverse audience with the use of interactive mapping tools, databases, and social media

Note. DEIJ = diversity, equity, inclusion, and justice.

For the purpose of this article, we focus on how we applied the DEIJ lenses to design authentic assessments with the use of technology in a fully online public health course. The next section discusses the connection between authenticity and the DEIJ lenses.

Diversity, Equity, Inclusion, and Justice and Authentic Learning: What Is the Relation?

Authentic assessment comes from the concept of authentic learning, which is a philosophy of teaching and learning connecting classroom learning with real-world experiences (Brown et al., 1989; Herrington et al., 2004, 2010; Shaffer & Resnick, 1999). Authentic assessments include projects, assignments, and tasks that situate students in the real-world context and encourage them to work on ill-structured problems (Wiggins, 1990). Newmann et al. (1996) emphasized the concept of intellectual accomplishment when it comes to authentic assessments; that is, students should be engaged in intellectually stimulating and meaningful activities that result in to the creation of a certain product, such as a performance, portfolio, or exhibition.

To illustrate the essence of authentic learning, Shaffer and Resnick (1999) identified and defined four core meanings of authentic learning: Authentic learning is (1) connected to real-world problems and situations; (2) provides opportunities for learners to make their own connection between their real life and learning, so authentic learning is personally meaningful; (3) is reflected in the types of assessments that are connected with learning tasks; and (4) involves disciplinary practices. Authentic assessments, based on the core ideas of authentic learning, are designed to replicate the

tasks and performance standards of a given discipline or profession (Villaroel et al., 2018). Thus, students should be situated and immersed in real-world situations and problem solving typically found in their professional careers.

Different scholars have reported that the use of authentic assessments leads to increased motivation, learners' agency over their learning, and the acquisition of skills and knowledge that increase employability (Houke, 2017; Lai et al., 2017; Luo et al., 2017; Ozverir et al., 2017; Peng et al., 2017; Trespalacios, 2017; Vo et al., 2018; Watson et al., 2018). Additionally, allowing students to improve on their work through several deliverables and attempts helps them grow both personally and professionally. Every learner should have the opportunity to show their best effort and have their voice heard in the learning process, which is directly connected to equity.

Situating learners in real-world scenarios while supporting each learner during their learning journey regardless of their background, origin, socioeconomic status, sexual orientation, or learning differences through necessary scaffolding and mentoring is a manifestation of how authentic learning is connected to the DEIJ dimensions. Providing authentic learning experiences, which include authentic assessments, that are connected to the real world and disciplinary practices is not enough to be called equitable and inclusive learning, although equitable access to experts, mentoring, and thoughtful feedback throughout learning experiences allows learners to build on their skills and find their learning path. Further, providing learners with choices for assessment, including real-life scenarios to analyze or projects to work on, supports their search for what is truly dear to them. We found that at the core of its philosophy, authentic learning and particularly authentic assessments are aligned with the dimensions of DEIJ and provide a suitable design and pedagogical orientation for creating equitable and inclusive learning environments. The next section of this paper is dedicated to our design narrative and concrete examples of authentic assessments with the use of technology in an online course.

Using the DEIJ Lenses When Designing Authentic Learning Experiences

When reflecting on the operationalized DEIJ terms, we tried to identify concrete design decisions and steps to create equitable and inclusive learning environments. One of the design frameworks that is aimed at providing guidelines for creating an equitable learning environment is the universal design for learning (UDL) framework (e.g., CAST: Center for Applied Special Technology, 2018). Although the framework provides options to accommodate various learning needs, implementing it when designing online courses can be challenging (Lachheb et al., 2021). Therefore, when making design decisions, we relied on our design judgments (Nelson & Stolterman, 2014) that we primarily drew from our precedent knowledge (Boling, 2020). We also grounded our design decisions in theory regarding equity and inclusion when designing online interactions for teacher, social, and cognitive presence.

When designing the course, we first reflected on the terms equity, diversity, and inclusion, identified what meaning we took from these terms, and determined how we could link the meaning of such terms to our design decisions. That is, we identified that the quintessential meaning was to cultivate the culture of acceptance and fellowship through the representation of various perspectives and voices. We believed that interactions would be a vital part of creating such an environment and that such interactions could be achieved through social presence and cognitive presence. We referred to the community of inquiry framework (Garrison & Akyol, 2013) to learn more about teacher, social, and cognitive presence. Regarding social presence in particular, designing interactions that cultivate a learning community and contribute to learning is crucial. Such interactions include small group discussions of topics that represent diverse populations and a variety of issues from different perspectives.

Finally, when reflecting on online learning, we realized that online learning, especially during the imposed isolation in a global pandemic, could exacerbate inequity among learners, as they could have different access to and experience working with technologies (Auxier & Anderson, 2020; Freire, 2000; Gorski, 2009). Therefore, we used the humanizing pedagogical strategy (Pacansky-Brock et al., 2020) that calls for building empathy with learners.

Diversity, Equity, Inclusion, and Justice as Manifested in Authentic Assessments

Description of the Course

The course titled Public Health Communication is offered to undergraduate public health students at a large Midwestern university. This course is designed specifically for those who will work largely in the field of public health, including, but not limited to, students majoring in community health, dietetics, exercise science, and health education. Just as public health professionals need to be considerate of diverse audiences, students need to have learning opportunities to create public communication messages and campaigns that consider DEIJ dimensions. Therefore, the major authentic assessment in this course includes developing and delivering speeches and creating multilevel public health communication campaigns. Notably, our design intent was not to have DEIJ as a separate topic or a stand-alone learning unit. Rather, we used the DEIJ lenses as our design tool and a framework for analyzing and redesigning previous content and activities to emphasize DEIJ issues. Our design intent was to encourage students to complete their learning activities and assignments with careful and thoughtful consideration of DEIJ dimensions.

Examples of Authentic Assessments Designed Through the DEIJ Lenses

Situating learning tasks and projects in real-world settings was not the only goal for this course. We also aimed for the course to be more like an internship for students so they could have an opportunity to grow both personally and professionally. For this purpose, we focused on scaffolding (Brush & Saye, 2002) to prepare students for their major projects through practice opportunities, which included discussions centered on DEIJ issues. We saw discussions as an opportunity for students to reflect on and analyze concrete real-life examples of these issues so that they could then transfer what they learned from their discussions into their speeches and communication campaigns, the major authentic assessments in this course. To prepare students to engage in these discussions, we designed an introductory module whose primary purpose was to raise awareness and get students thinking about these issues. The module also included information about implicit bias and how to acknowledge one's own biases. It is important to stress that this module served as a way to build foundational knowledge about DEIJ issues. The course learning activities and assignments were meant to encourage students to further reflect on these dimensions as they completed their assignments. Our design intent was to design learning activities and assessments that would build upon each other and circle students back to the introductory module so that students would be continually encouraged to refresh their knowledge about the DEIJ dimensions and think about the importance of considering them when completing their authentic assignments/assessments. In this way we hoped to foster student engagement with DEIJ issues.

Every student received individual feedback from the instructor to help them think on a deeper level regarding the importance of thoroughly considering the DEIJ dimensions when creating public health communication messages. In addition, discussions were a platform for student–content, student–student, and student–instructor interactions. Keeping a professional and respectful tone was one of the key requirements for participation in online discussions, especially when discussing DEIJ-

related issues. Considering that students worked in teams on their major assessments, online discussions helped them practice their professional communication skills.

For these discussion assessments, we leveraged existing tools available within the Canvas learning management system (LMS) and external resources, such as external simulations. Further, students had an option to video record their answers using the Kaltura tool embedded in the discussion board. This served as an additional practice opportunity to record and deliver speeches in an online format.

Example 1: Discussion forum related to ethical issues in public health communication. As Figures 1 and 2 show, students were tasked to look at a public health communication poster and then to watch a video related to the danger of knowing only one side of a story. The design intent behind this learning activity was to encourage students to reflect on examples of biases captured in public health communication and their negative effects. Watching the video related to the danger of a single story had two major purposes: (1) to help students examine their own biases and reflect on their lived experiences when they were in a situation where they felt biased or witnessed a bias toward someone; and (2) to transfer this experience to their task of creating professional public health communication campaigns and to consider what negative effects a public health communication campaign would have if someone were excluded or unfairly represented. That is, we aimed to help students practice building empathy with their audience.


Week 2

Purpose

The purpose of this discussion is to identify stereotypes and/or implicit biases that can misrepresent certain populations and practice applying the ethical foundations of public health communication to address such stereotypes and/or biases.


Task

Please look carefully at the ad and watch the video below, and answer the questions listed under the video:



YOUR BABY SLEEPING WITH YOU CAN BE JUST AS DANGEROUS.

Black babies are more likely to die from SIDS. Always use your crib with a firm mattress, no pillows, and no blankets. If you can't sleep, call 1-877-234-6000.




YOUR BABY SLEEPING WITH YOU CAN BE JUST AS DANGEROUS.

White babies are more likely to die from SIDS. Always use your crib with a firm mattress, no pillows, and no blankets. If you can't sleep, call 1-877-234-6000.

Figure 1. Example of a public health ad for analysis. This task was presented to students on the discussion board.

The Danger of a Single Story



Please answer the following questions:

1. What stereotypes does the ad reinforce?
2. What stereotypes and/or biases did the speaker highlight in her speech? In your opinion, why do you think such stereotypes can be dangerous?
3. In what way can the ethical principles you have learned this week help address the stereotypes you identified in the ad and the video?
4. If left unrecognized, in what way can such stereotypes and/or biases make public health communication campaigns ineffective at reaching a wide audience?

Respond to two peers.

Figure 2. An image of the video titled “The Danger of a Single Story” and a list of questions for students to answer.

Example 2: Analysis of the context of target populations. The multilevel public health communication campaign project consisted of several deliverables, including one called “Audience Analysis.” Students were tasked first to do a thorough analysis of their target audience or population, then to select appropriate communication channels, and finally to craft messages. To prepare for this deliverable, students participated in a discussion forum to analyze the target audience for the public health campaign of their choosing. They could choose from the following public health campaigns selected because they represent current pressing public health issues: (1) Xanax Rehabilitation; (2) Drinking and Driving in College; (3) Healthy Eating; (4) The Heart Truth. When selecting the above listed campaigns, we made sure the topics targeted issues relevant to diverse populations in terms of age, gender, and socioeconomic status.

Prior to selecting appropriate communication channels for reaching their identified target population, students were tasked to use an interactive mapping tool and database called CARES Map Room. The CARES Map Room allows users to search for information regarding demographic characteristics of the chosen population, as well as their access to resources, such as high-speed internet connections. This was meant to reinforce being thoughtful about people’s access to technologies when deciding what channels of communication to use. The key idea is to ensure public health communication campaigns are helpful, useful, and accessible.

The design intent behind this learning activity was twofold. First, students practiced using the online tool to find relevant information about their target population so that they further approached the design of their public health communication campaign in an empathetic and thoughtful manner. That is, the key idea was to help students use credible sources to identify and tailor communication to

the target population in a way that was equitable and inclusive for every member of the given population or community. Second, students practiced the analytical thinking needed to make data-driven decisions. Figure 3 provides an image of the task for this discussion forum, and Figure 4 shows the homepage of the CARES Map Room interactive mapping tool.

Purpose

The purpose of this discussion is to practice selecting appropriate channels of communication for a public health campaign.

Task


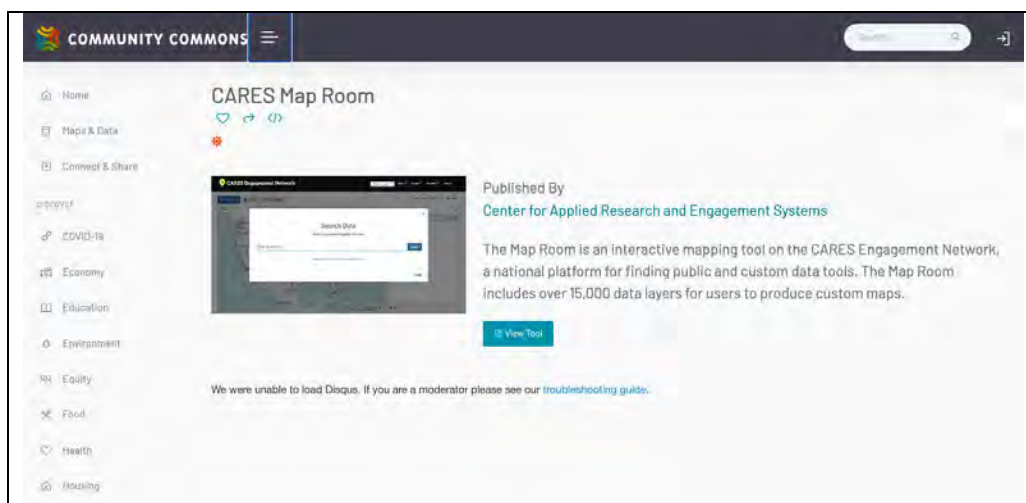
1. Choose one campaign from the list below.
2. Choose a specific geographic location/community to target your campaign.
3. Carefully examine a demographic profile in the chosen community. To do so, please go to [Cares Map Room](#) . The short video below shows how to navigate the website and generate a community demographic profile.

4. Carefully examine the Community Demographic report that you can generate using the website below. Based on the given data, choose 3-4 appropriate channels and explain why you chose them for the given campaign and chosen community and audience.
5. Please explain why the chosen channels are appropriate for ensuring equitable and inclusive access to the chosen campaign among the given target audience in the chosen community.

Figure 3. An example of a discussion forum for considering the characteristics of the chosen target population when choosing communication channels for a public health campaign. This page shows a screenshot of the discussion forum introduction page, the purpose and task for this discussion, and a link to the CARES Map Room interactive mapping tool and database.



The screenshot shows the homepage of the CARES Map Room on the Community Commons platform. The page features a navigation menu on the left with categories like Home, Maps & Data, Connect & Share, COVID-19, Economy, Education, Environment, Equity, Food, Health, and Housing. The main content area is titled "CARES Map Room" and includes a search bar, a "View Tool" button, and a description: "The Map Room is an interactive mapping tool on the CARES Engagement Network, a national platform for finding public and custom data tools. The Map Room includes over 15,000 data layers for users to produce custom maps." The page is published by the "Center for Applied Research and Engagement Systems".

Figure 4. The homepage of the CARES Map Room interactive mapping tool.

Example 3: Leveraging external simulation tools. Teamwork is at the core of this course, appropriately, considering its importance in most professional careers. The key goal of this assessment was to help students conduct successful conflict resolution, find common ground, and value each other's perspectives and contributions. As members of a team, students evaluated their own work and the work of other team members through a specific questionnaire and reflections. In addition, they were able to practice discussing and analyzing the importance of interpersonal skills when working with others and to reflect on ways they could improve their skills. Further, the design intent was to give every student the chance to use their authentic voice in analyzing scenarios related to interpersonal communication and to voice their perspective on what they considered a successful collaboration and what interpersonal skills made it successful. To reiterate, the intent was to ensure that nobody was left behind and everyone was heard. Figure 5 shows a title page of a simulation.



Figure 5. Title page of a simulation provided with the use of an external tool.

Example 4: Providing students with choices for analysis of public health communication campaigns. From our design perspective, choices that represented a plethora of issues relevant to diverse populations made learning more inclusive. Therefore, when designing discussions, we did not focus solely on finding real-world issues but also made sure we included public health issues that revealed inequity or lack of inclusion. For instance, one of the examples of a public health campaign for this discussion forum was an antismoking campaign. This campaign provided important historical contexts, including how African American populations were long targeted in tobacco companies' advertisements. This provided a further reason for reflecting deeply on the importance of fair and equitable representation of populations and avoiding further exacerbating issues of racism and inequity. The design intent for this learning activity was to draw attention to such issues and encourage students to reflect on them

so that they could avoid such inequitable, discriminatory, and unethical practices in their public health communication messages. Figure 6 provides images of the discussion forum.

A


Task

Type of work: INDIVIDUAL
Submission: INDIVIDUAL

FIRST: Choose one of the three options listed below to consider an existing campaign, and answer the following questions:

1. Can you identify the goal of the campaign?
2. What are the audience or audiences for this campaign?
3. What are the messages?
4. Do you see any stereotypical representation or implicit bias of a given population in the selected campaign? If so, please explain.

Option 1: HIV Campaign




4885 likes
carmen_camera Get tested! Yes everyone it's December 1, World AIDS day! This year we've teamed up with the NYC Department of Health to #beHIVsure and

B

Option 2: Anti-Smoking Public Health Campaign

Please visit the website to analyze the campaign: [The Truth Initiative: Anti-Smoking Public Health Campaign](#)

Option 3: "The Wait for Water" Campaign



Watch on YouTube

Figure 6. Choices for analysis of public health campaigns and a list of questions for students to answer. (A) An HIV campaign. (B) An antismoking campaign and the "Wait for Water" campaign.

Example 5: Example of a discussion forum for speech analysis. One of the major assessments in this course was to design and deliver two speeches: one informative and one persuasive. The design intent

of this discussion was to give students a chance to analyze speeches for their content and delivery and to encourage students to explore a variety of public health issues expressed in speeches and to consider the perspectives from which such issues are presented. This discussion learning activity included examples of different speeches delivered by diverse presenters on a variety of public health issues. Figure 7 shows images of the discussion forum.

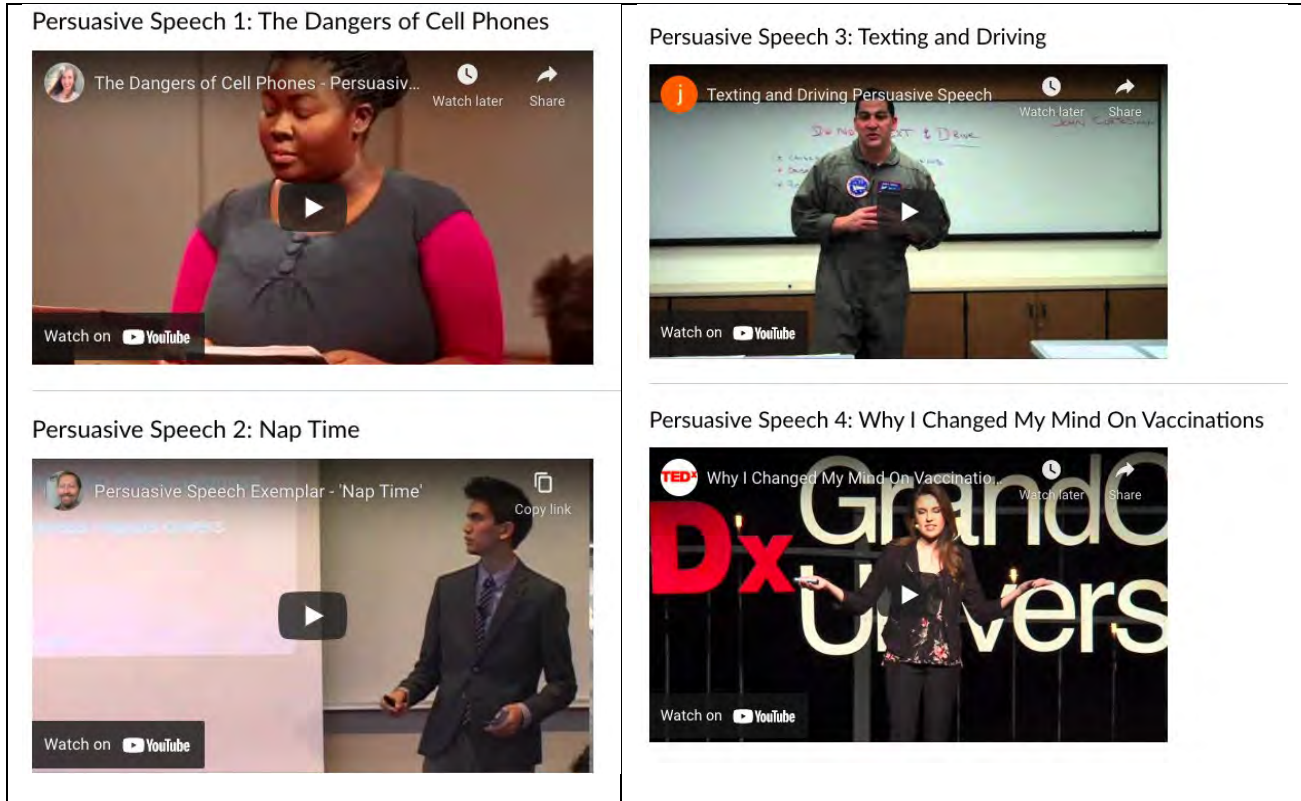


Figure 7. Examples of persuasive speeches for analysis.

It is also important to note that we leveraged the rubric tool provided by the Canvas LMS, which served as a formative assessment for the students. The rubric tool was essential in guiding students toward the competencies they were expected to exhibit and as an instrument for self-regulated learning (Panadero & Jonsson, 2013). Making the rubric available to students ahead of time not only made the pedagogy transparent but also encouraged them to identify areas for improvement in their responses. As Figure 8 shows, the rubric itself integrates the DEI dimensions through encouraging students to be thoughtful with the tone of their posts and the facts that they share to support their arguments, to avoid biased and stereotypical representations of a particular issue among a given population.

Criteria	Ratings				Pts
Content	<p>2 pts Excellent</p> <p>The post demonstrates in-depth understanding of the topic/s covered this week. The student demonstrates in-depth understanding of the course material by referencing weekly readings, video lectures, and including, where appropriate, relevant examples. When making a claim the student supports their assertions with evidence coming from weekly readings or video lecture, or an additional reputable source. The students' post does not contain generalizations, unsupported claims, and logical fallacies.</p>	<p>1.2 pts Good</p> <p>For the most part, the student's post exhibits understanding of the topics being discussed. In their post, the student refers to either weekly readings or video lectures. The students' claims are supported with evidence and reputable source. The post does not include unsupported claims or false facts that could be misleading or confusing.</p>	<p>0.8 pts Needs Improvement</p> <p>The student's post is rather vague and superficial. The post does not reference weekly materials (readings and video lectures), and/or the post includes questionable facts or generalizations that can be misleading or confusing.</p>	<p>0 pts Unsatisfactory/No Submission</p> <p>The student's post does not at all address the questions asked. The post is either absent, or too brief to demonstrate understanding of the course material.</p>	2 pts
Style and Tone	<p>2 pts Excellent</p> <p>The student's post uses respectful, polite, and professional tone. The student's post does not contain words, expressions or assumptions that would stereotype, demean, or exclude people coming from different backgrounds (ethnic, socioeconomic, racial, gender, sexual orientation, disability, and cultural).</p>	<p>1.2 pts Good</p> <p>The student's post generally uses respectful, polite, and professional tone. Occasionally, the student's post uses jargon or slang that is more appropriate for informal communication. The student's post does not contain words, expressions or assumptions that would stereotype, demean, or exclude people coming from different backgrounds (ethnic, socioeconomic, racial, gender, sexual orientation, disability, and cultural).</p>	<p>0.8 pts Needs Improvement</p> <p>The student's post uses mostly casual and informal language that could lead to ambiguous interpretations of used terms and expressions.</p>	<p>0 pts Unsatisfactory/No Submission</p> <p>The student's post uses inappropriate language and unprofessional tone, and/or the post uses terms that may have been acceptable in the past but are no longer respectful terms.</p>	2 pts

Figure 8. A screenshot of the rubric used for assessment of discussion board posts. The page shows the “Content” and “Style and Tone” criteria, which focus not only on the incorporation of the theoretical material but also on the respectful and mindful tone of posts and proper representation of information without logical fallacies and implicit biases.

Example 6: Analysis of a public health website. In addition to including discussions with examples of public health campaigns and reflective questions that centered on DEIJ issues, we designed miniprojects to prepare students for their major assignments/assessments. One such project included the analysis of a public health website. We provided students with a specific artifact (a website) and designed a tool to facilitate their analysis through the DEIJ lenses. Specifically, we designed a DEIJ evaluation tool (Figure 9) that allowed students to look for items for analysis and critically reflect on and evaluate the content and included media on the website. The rubric served as an initial step in students’ website evaluation and was used as a facilitation strategy to activate their analysis and critical thinking.

DEIJ Evaluation Sheet for Website Posting

Name: _____ Team # _____ Date: _____

Website Name: _____ Public Health Topic: _____

Instructions: Use the Matrix below to submit your reflections on the content selected for your discern analysis. **This assignment MUST be completed AFTER you have finished your discern analysis.**

- First select the text or image you intend to examine. Paste the content on the CONTENT EVALUATED column.
- Second, select Yes or No to indicate if the selected content addresses the specific DEIJ category.
- Third, briefly explain in your own words your rationale for each evaluation.
 - o You may submit more than one content example (images or/and text).
 - o You may evaluate each content example in any number of categories you choose (between 1 and 4).
- Fourth, submit your DEIJ worksheet on Canvas separately from your discern analysis.

Content Evaluated	Diversity	Equity	Inclusion	Justice
Insert TEXT or IMAGE HERE	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
Insert TEXT or IMAGE HERE	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
Insert TEXT or IMAGE HERE	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>

Figure 9. A screenshot of the diversity, equity, inclusion, and justice (DEIJ) rubric that students used for the website evaluation miniproject.

Major Authentic Assessments in the Course

The above discussions served as formative assessments that were meant to prepare students for the deliverables of their major course projects: speeches and a multilevel public health communication campaign. Students were not only assigned to prepare a speech about a relevant public health issue but were asked to frame it in a way that was inclusive of diverse populations. To deliver their speeches in an online course, students used the Kaltura video tool.

In preparing their multilevel public communication campaigns, students conducted a thorough audio analysis, crafted messages, and chose appropriate channels to share messages, but they also considered dimensions of DEIJ to ensure their messages were accessible, inclusive, and did not exacerbate possible biases regarding a particular population. The above discussion activities were crucial in helping students think through these important issues and reflect them in their major assignments.

Concluding Thoughts and Reflection

We have provided our rationale for conceptualizing the DEIJ dimensions on the basis of the reviewed literature and have shown concrete examples of how we manifested them in our design work. We specifically focused on authentic assessments that were designed to scaffold major assessments in a fully online public health course. These assessments served as important practice opportunities for

students, as they were meant to prepare and mentor students for their major assessments. We believe that it is essential for students to be able to improve and grow in the process of learning, rather than as a result of a summative assessment. This represents our core design judgment in relation to providing equitable and inclusive learning. Through additional practice and feedback, all students had an opportunity to improve and acquire skills and knowledge.

Designing this course with the DEIJ lenses in mind was both a challenging and a rewarding experience for us. The most challenging aspect was to distill the meaning of DEIJ and make sure we ourselves as learning designers were aware of our biases and beliefs. With these dimensions being multifaceted and covering many different characteristics, including race, ethnic origin, socioeconomic status, gender, power, and privilege, it was important for us not to design with the assumption that we shared the same experiences with people coming from different racial, cultural, ethnic, or socioeconomic backgrounds. This required us to always keep our minds open to learning about the experiences of other people and to constantly educate ourselves on the topic of DEIJ, such as by seeking out scholarly and practice-oriented materials. We were rewarded with a wonderful learning opportunity, as we were able to strengthen our understanding about these dimensions and to be more cognizant of these issues in real-life situations, as well. As we enriched our knowledge about the DEIJ dimensions and focused on these issues in our course design, we could provide students with more authentic learning. In designing this course, we utilized a plethora of resources and tools. We found it helpful to refer to the principles of accessibility, usability, authentic learning, and the community of inquiry framework for considering student–student and student–instructor interactions. We also drew on our collective design experience and repertoire of knowledge, and we practiced critical reflection to be intentional and thoughtful with our design decisions and actions.

Additionally, we recognize that DEIJ is multifaceted and the dimensions include a variety of topics and issues. Therefore, DEIJ lenses do not manifest themselves in only one activity, one module, or one assessment. They need to be presented as the common theme in the course and be manifested through content, activities, and assessments to create an organic whole. For this article, we focused on designing authentic assessments through the DEIJ lenses with the use of a variety of technological means. Notably, to be able to amplify the benefits of authentic assessments we went beyond using just the technologies provided within the institutionally supported LMS to include (1) technologies that allowed for discussions, sharing, and the expression of ideas through analyzing real-life cases and scenarios, such as discussion boards; (2) external simulation tools that helped situate students in the realism of a given professional situation, such as interpersonal communication in public health and medical settings; (3) external tools, such as online databases and interactive mapping tools that allowed students to research a particular target population and analyze it from different perspectives, considering the culture, context, and realities of their respective communities; (4) tools to stimulate reflection and self-regulated learning, such as the rubric tool within the Canvas LMS; and (5) online video tools, such as Kaltura, that allowed students to deliver their speeches online and submit them for assessment.

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