**Equitable Education Systems Online: Exploring the Online Student Experience through a Culture of Inquiry**

Michelle Vaughan, Ed.D

Florida Atlantic University, United States

**Abstract**

The AERA theme of *Cultivating Equitable Education Systems for the 21st Century* ask participants to consider the following question: In my context, what kinds of teaching and learning processes foster equity, disrupt systemic inequality, and deepen learning? The culture of inquiry borne from this symposium presentation unpacked and uncovered the challenges that exist in each of our individual contexts as we attempt to address that question through the dialogue about our shared experiences. This paper examines the theme through the lens of online teaching and learning experiences within the United States. My inquiry into online equitable teaching practices began with a grounded theory approach to understand how online graduate students describe their experiences as an online learner and their relationships with their instructors. A thematic analysis of their responses revealed themes regarding the relationship between the instructor and student and the role of communication in the quality of that relationship. Subsequently, it was clear that the relationship between instructor and student greatly impacted their ability to "be themselves" in the course and engage in a meaningful way. An action research cycle was then completed to initiate some of the pedagogical ideas shared by graduate students that aligned with my own living educational theory. Within my own context of online learning, I see the challenges presented by the virtual medium leading to inequity in learning. Without a physical connection or the ability to feel the exchange of loving energy from your teacher, online students can be left isolated, and the pedagogy can easily slip into an execution of tasks as opposed to a pedagogy of care. The ideas discussed in this paper are focused on creating equity in online learning, however, I would argue that the significance in these ideas and the true goal is to create equity-minded humans through modeling what authentic caring and love can look and feel like.

**Purpose**

The purpose of this paper is to interpret the AERA theme of *Cultivating Equitable Education Systems for the 21st Century* through the lens of online teaching and learning experiences within the

United States. Beginning with the posed question of 'In my context, what kinds of teaching and learning processes foster equity, disrupt systemic inequality, and deepen learning?,' the culture of inquiry borne from this symposium presentation unpacked and uncovered the challenges that exist in each of our individual contexts and practice to foster equity around us.  A culture of inquiry can be defined as "a safe, supportive space wherein practitioner-researchers are enabled to share their vulnerabilities, to make explicit their values, and to hold themselves accountable for living according to those values" (Vaughan & Delong, 2019). To build cultures of inquiry, I believe it is necessary to integrate vulnerability as a cornerstone of the dialogue shared between members of the group. As our group began their work together in November 2021, I shared some of my initial thoughts around our guiding question in the writing below:

> This question is one that I think about often because the context of my teaching and interactions with my graduate students occurs primarily online and often asynchronously. Thinking of myself as a learner, the times in which my own thinking has shifted, and recognition of systemic inequalities has occurred has been through meaningful dialogue with others and the sharing of experiences that bring forth emotional responses. While I try to educate myself in many ways about the historical inequities that exist in my own country, it is truly the conversations I have with those who find themselves at the center of a myriad of inequities that foster my own understanding and deep learning. For example, conversations with Black mothers within my community quickly highlight how the systemic inequalities that exist in our country are discussed differently at each of our dinner tables.

> The challenge exists for me, as an educator, in mirroring these learning experiences in an online space. How can I create conditions where my own students can safely share their experiences so those around them can connect to them and learn? I believe deeply in "connection first, content second" in my teaching, and the diversity of my own student population and experiences should provide a great starting place for these conversations, but I frequently get stuck in the limitations of the medium (M. Vaughan, personal communication, November 28, 2021).

As an action researcher, I felt compelled to jump in and begin to introduce some new ideas into my teaching to get closer to my intended objective and "solve" the problem. But in the group discussion with our AERA culture of inquiry that followed my initial writing, I reflected on the importance of stepping back to create space for my students instead of diving in.

In the linked video, I discuss my reflections after reading the work of my peers (14:25-16:50).

In the transcript below, I discuss how my eagerness to "fix" the issue of inequitable practices may unintentionally lead to the creation of more inequitable practices as it assumes that I am aware of all the inequities that exist in my practice, in the learning space, and in the lives of my students. This is a dangerous tendency as a researcher and one that I often warn my own students about!

By the end of the transcript, I discuss how I believe it would be more valuable to begin my next semester by asking questions and providing space and time for my students to discuss their own ideas about inequitable practices in their learning (and possibly teaching).

> One of the things that I saw come up in a couple of pieces our writing was this idea about, and I decided to write my own first and then read other people's, so after I read everybody else's I thought 'Oh, well it seems to be that there could be a potential thing here about creating space or safe space for these conversations or for just discussion or just being.' Then I went back and I kind of looked at what I had written and was like, you know it's funny because I think that I did you know in my own writing I feel like I did something that I am always warning my teacher researchers against. I went in and said 'Oh I already know what the problem is. I already know what this is and here I kind of jumped right into it, like maybe these are some things I could do to fix it.' Then I read Parbati's and got to the end where she has this challenge about who are the disadvantaged groups and I thought 'well geez, I feel like I already pre-emptively answered that question without even asking the question.' So I think it really was helpful for me to read everybody else's writing and maybe what I would like to do is to start asking some questions for my students and creating some space for them to tell me what is pressing for them, what they feel, what they see, what, if they had the magic wand, what they what they would like the experience to be like and then how they think I could be a service in that. So, it was a really good exercise for me who really likes to get to the end and find and find the solution and tie it with a

bow. It was a really good exercise for me, and I think it's definitely put me back into that frame of mind of slowing down a little bit and asking questions and creating space. So, I feel like, personally, that's what I'm going to enter into the next term thinking about is how to do that. Thanks everybody for your contributions (Vaughan, M. 2021, November 29)

Thus, I began to craft some guiding questions that I could begin asking my online graduate students to understand their experiences as an online learner and how they would define and recognize equitable teaching practices in an online medium. I began with the following draft guiding questions to guide my line of questioning and literature search. As these ideas unfolded within our culture of inquiry, the inquiry for this paper began to take shape.

*What are some of the inequitable experiences that may occur in an online graduate program?*

*What online teaching practices do graduate students report as deepening their learning?*

*What can online professors do to create an equitable learning environment that fosters deep learning?*

*How can learning relationships be strengthened online?*

**Theoretical framework**

Garrison and colleagues (2000) proposed a theoretical model that introduced three presences – social presence, cognitive presence, teaching presence – as primary elements for successful online education. The three presences are dependent on each other for a successful experience online. For example, cognitive presence occurs when teaching and social presence are well developed, and the development of social presence is dependent on how well the teaching presence has been established. For my own line of inquiry, I believe social presence may be a necessary component of the course experience for students to feel that they are a valued member of the course community. Social presence is defined as "the ability of participants in a community of inquiry to project themselves socially and emotionally, as 'real' people (i.e. their full personality), through the medium of communication being used" (Garrison et al, 2000, p. 94). It is interesting to note that the research seems to discuss social presence as the "glue" between teaching presence and cognitive presence. Thus, if the goal of creating a strong sense of social presence includes creating a community in which students feel comfortable to be their "real" selves, then it is necessary to figure out what instructional strategies or pedagogical tools support students feeling comfortable to be themselves.

In practice, it would seem that educators need to have sound equitable teaching practices (teaching presence) to create a community of inquiry in which students felt comfortable and safe being vulnerable and expressing their opinion (social presence). As a result, a higher level of cognitive engagement and critical thinking can occur in the online medium (cognitive presence). If teaching practices are the foundational aspect to developing cognitive engagement in online learning, a closer examination of the research in this area is necessary.

There is a plethora of research that identifies and isolates aspects of online teaching that support student success in online learning in higher education. Although much of this research uses traditional measures of student success (achievement), it is helpful to see if there may be teaching strategies that support achievement as well as the construction of a community of inquiry that supports a strong social presence and may deepen the online student experience. Bailey and Card (2009) built from the seminal work of Chickering and Gamson's (1987) seven principles of effective practice in undergraduate teaching in their phenomenological study of award-winning eLearning faculty. Their work proposes eight effective teaching practices for online educators: fostering relationships, engagement, timeliness, communication, organization, technology, flexibility, and high expectations. As I seek to deepen my knowledge on equitable practices in online learning, I am drawn to their discussion on how eLearning faculty are fostering relationships in their practice. The authors identify instructors' empathy for students, passion for teaching, and willingness to help students succeed as key factors for fostering relationships (Bailey & Card, 2009). While these are helpful pedagogical objectives, there is significantly more to understand about *how* educators can demonstrate empathy, passion, and willingness to help to their online students.

More recently, Sun and Chen (2016) reviewed 47 published studies to determine that effective online instruction is dependent upon 1) well-designed course content, motivated interaction between the instructor and learners, well-prepared and fully supported instructors; 2) creation of a sense of online learning community; and 3) rapid advancement of technology. They found that numerous studies supported a strong correlation between social interaction and sense of community in achieving success in online learning. However, upon completion of their review, they determined that "although many studies emphasized the importance of creating such a learning community, they lacked effective and detailed means, approaches, and technologies that could be used to achieve that objective (p. 171)."

After reading a myriad of studies completed in the field, I struggled to gain a clear picture of how equitable teaching *looks* in the online medium. Furthermore, what does a teacher *do* when they

teach online and wish to embody key principles of equitable education? Faculty at University of Wisconsin-Green Bay had similar questions and, to aid instructors in their mindfulness of equity-minded and inclusive teaching practices in online courses, they built from work completed by the University of Southern California's Center for Urban Education (CUE) to create a method for analyzing and aligning course design and instruction with the goals of equity and inclusivity. Their rubric (https://whitesforracialequity.org/wp-content/uploads/2017/07/Equity-for-Online-Classes_GB-Wisconsin.pdf) identifies six principles; inclusivity, respect for diversity, values diverse life experiences and ways of knowing, advocates high expectations for all students, accessibility, and continuous improvement and self-evaluation to assist instructors in analyzing their online course curriculum and instruction. The detail included in this rubric gives instructors a meaningful place to begin equity-minded work on their online pedagogy. It is also my hypothesis that creating an online community of learners where students can be an authentic version of themselves may support feelings of equity among students and, as a result, deepen the learning experience.

### *Connecting to My Values*

This inquiry connects to my own living educational theory through my values of connection and care in my practice (Vaughan, 2019). As an educator (and human), I strive to develop meaningful connections with those around me and examinations of my practice show that I infuse humanizing characteristics like vulnerability into my practice to create pathways for connection. While there are a number of definitions of connection that exist, Brown's description (2010) of connection as "the energy that exists between people when they feel seen, heard, and valued; when they can give and receive without judgement; and when they derive sustenance and strength from the relationship" (p. 19) resonates most with me. I find additional support for my core values through the ideas of caring and engrossment by Nel Noddings (2005). Engrossment is the total and complete focus on the other individual at that moment in time, the act of truly listening, caring and an overwhelming feeling of wanting to help or connect with that individual to move them closer to their expressed goals. Her seminal work in the field of caring as a pedagogy was instrumental in my own development as an educator and theorist. Furthermore, bell hooks (2014) explains that "as a classroom community, our capacity to generate excitement is deeply affected by our interest in one another, in hearing one another's voices, in recognizing one another's presence" (hooks, 2014, p. 8). In order to do that, "teachers approach students with the will and desire to respond to our unique beings, even if the situation does not allow the full emergence of a relationship based on mutual recognition. Yet the

possibility of such recognition is always present" (p. 13). This approach to teaching and creating relationships with students is described by hooks as engaged pedagogy and creates space for multiple voices in a classroom, ensuring that all members of the classroom community are empowered and seen.

**Modes of inquiry**

My inquiry into online equitable teaching practices began with a grounded theory approach to understand what the current online experiences for my students may be. I want to guard against any assumptions about what I believe the graduate student experience may feel like. To gather initial information, I sent out a brief survey to all graduate students enrolled in my online program to provide information about their online learning experiences. My objective was to ask students to explain what they believe equitable teaching practices look like in the online modality and to also identify some course experiences that have supported or negated meaningful learning in their online coursework. Most students receiving the survey are currently classroom teachers and have significant background in education, so I believe their own knowledge base could contribute greatly to the complexity of their answers. The following questions were sent out to graduate students as open-ended response survey questions:

*What online teaching practices have helped to deepen your learning?*

*How can relationships/connections between the instructor and student be strengthened online?*

*What makes you feel comfortable (able to be yourself) in an online course?*

*How can professors demonstrate that they support you in your coursework?*

*How can professors build a sense of community within your courses?*

*What challenges or barriers to learning do you experience in your online courses?*

*How can professors demonstrate respect for diverse knowledge and learning in an online course?*

*What makes you feel valued for the unique knowledge/value you bring to an online course community?*

Following the analysis of survey results, key instructional strategies were then integrated into my own online teaching practice in an action research cycle to assess their impact on my online graduate students' feelings about their learning experience. The results of both the initial survey and the resulting action research cycle will be shared in the following sections.

**Data sources**

There are a number of data sources used in this inquiry. As previously described, survey data contributed to an initial understanding of online graduate student experience around equitable teaching practices and experiences that contributed to meaningful learning experiences in their program. The use of videos from our conference planning sessions are key pieces of data (as shared in this paper) to validate the melding of multiple values into a concerted effort to create safe spaces in which to build cultures of inquiry.

> Visual data can also play a role in capturing nonverbal communication and an exchange of life-affirming energy that is unable to be recorded when looking at a transcript of a conversation. It is these nonverbal cues that are often so important in building trust and encouraging the members of a culture of inquiry, whether micro or macro, to grow in their thinking and independence (Vaughan& Delong, 2019, p. 83).

Videos from the conference planning sessions (along with included transcripts) not only depict the growth in my inquiry ideas but show how the understanding of key concepts included in this paper gain depth and connection to others through the shared experience of this culture of inquiry. The resulting effect is a stronger individual effort through the exchange of ideas and experience created when those involved in the culture of inquiry can "be themselves" and learn through others.

Lastly, video data collected from the action research cycle in my own teaching is included as evidence of the efforts to be mindful of the equitable teaching practices I employ. These videos include valuable student perspectives for me, as a practitioner, but also for the greater population to reflect on the human experience in an online world.

**Results**

Results of the initial survey to graduate students (n=15) revealed some key insights into their experiences as online learners and their definition of what equitable and meaningful teaching practices look like to them. Through an analysis of their responses to the questions previously listed, clear ideas began to emerge very early around ideas regarding the relationship between the instructor and student and the role of communication in the quality of that relationship. Subsequently, it was clear that the relationship between instructor and student greatly impacted their ability to "be themselves" in the course and engage in a meaningful way. The following themes represent the ideas expressed by survey results.

### Evidence of Investment

Students reported that professors demonstrate respect, strengthen relationships, and make them feel valued through repeated evidence of their investment in the course experience and individual students. In practice, this shows up in varied instructional strategies. Most frequently, this can be seen (both positively and negatively) in the timeliness of professor response and assignment feedback. Students reported that timeliness in response was indicative of the professor's "willingness to communicate" with students. This willingness to engage with students in a timely manner was frequently mentioned as a way to build stronger relationships between instructors and students. This same idea shows up in the literature as "willingness to help" and is linked to equity-minded practices (University of Wisconsin, 2015) and fostering relationships (Bailey & Card, 2009). Students gave additional examples of practices that can be categorized as evidence of investment, such as teacher involvement on discussion boards and virtual office hours. However, timely communication was, by far, mentioned most frequently as evidence of an instructor's investment in their personal learning experience.

### Varied and Frequent Lines of Communication

Students reported that professors could honor the diversity in their knowledge, make them feel comfortable, and demonstrate support through "varied and frequent lines of communication." This is an interesting practice to consider because it can counter some logical thinking about setting clear communication expectations for students to avoid confusion. Traditionally, some instructors may believe it is best to communicate using one method to avoid confusion for online students. However, the intent, as explained by student responses, behind employing varied lines of communication is to create diversity in learning and relationship-building opportunities. For example, students asked for opportunities to communicate with their instructor through the discussion board, assignment feedback, whole group synchronous sessions, and small group/individual sessions. The varied nature of these opportunities honors the time constraints and learning preferences that graduate students have. In practice, instructors can reflect on how they are showing up in ways to communicate with their students. Is it only through personal email? Have they met with them as small groups? Are there opportunities for the entire class to come together to learn? The answers to some of the questions, as it did for me, can identify the gaps in communication and missed opportunities for connections with students.

### *Respond, not React*

In their responses to the survey, students explained *how* professors respond to communication requests, questions, or problems can directly impact how the students perceive they are valued by their professor. For example, students shared experiences about professors responding to questions with "insulting comments" or "shade." While this was not the majority of experiences shared, it is important to consider that *how* we say something in an online environment can be more important than, or potentially overshadow, *what* we say because a virtual experience may lack nonverbal cues and the ability to "see" the impact of your words on those around you. Bailey and Card (2009) highlighted empathy as a practice to foster relationships in online teaching and the responses we craft to online students are opportunities to demonstrate empathy within an online course. Interestingly, students recommend that professors make explicit declarations of support as ways to show their intentions and make them feel valued. Proactively responding to all students with messages of support (before being asked for help) and engaging in problem-solving communication from a place of caring are instructional practices that can be seen as equity minded. These practices are also echoed and detailed as a principle of inclusivity in the work completed by the University of Wisconsin (2015).

### *Action Research Cycle of Implementation*

After reflecting on the alignment of the survey results with my own core values of connection and caring in my teaching, I designed an action research cycle that would allow me to explore how I can improve my own practice through the lens of equitable teaching practices. Within my graduate capstone research course, I chose to immediately implement Zoom-based office hours using a flexible scheduling approach. In previous action research inquiries, I have examined the role of feedback and communication in my practice (Vaughan, 2017; Vaughan, 2019), but I recognized that I could highlight my investment in the learning experiences of my students through an additional mode of contact. Beginning in the 4th week of the semester, I set up a flexible scheduling link (Doodle) and messaged it to students, giving them the option of signing up for four different Zoom times the following week for additional help, conversation, or questions. Out of 15 students, I had five students sign up within 24 hours. As an experienced online educator, it was eye-opening to me that a third of my class immediately wanted to partake in additional class meetings! Also, it is important to note that the intentions for attending varied (as they shared), three students attended to hear about upcoming assignments and connect with me and their peers and two students attended to receive help on previous assignments that they were revising. I met with one student individually and four others as a group (based on times

they self-selected). Following the group meeting, I engaged in a discussion about why they attended virtual office hours and how this practice supported them in their learning experiences in the course. The recording for the conversation is below and I have highlighted two responses (Ebony and Maria) because they align to ideas presented by the graduate students who responded to the initial survey. Ebony expresses ideas about how this type of meeting "every so often" adds to her course experience and I believe highlights how important the frequent and varied lines of communication can be in an online experience. Similarly, Maria explains that this informal touchpoint shows her that her professor "has her back," indicating the evidence of investment discussed earlier.



https://youtu.be/gPkV01QBgiQ

Ebony: To be able to just have a meeting every so often just to touch base or to see you know what's going on, or you to explain something to get us involved, it helps me tremendously and I'm not person that really likes to get a lot of help so I'm loving it, I'm loving it, I'm loving it, okay.

Maria: I know that this sounds crazy, but I like being able to put names to faces. I also like to make it more personable because, I feel like it's a journey for all of us, but when I'm actually able to see, like I know my professors face. I'm like, Okay, she really does have my back. I mean it just makes this whole experience a little less just 'me and my computer' and a little more personable, which I really do appreciate it.

An additional outcome of this practice was the sense of community fostered between students in these meetings. The clip below shows an 13 minute exchange which began when Ebony sought help on her own research design. Maria jumped in to support her and share ideas to realign her project and make it more meaningful to her own practice. Both Maria and I used vulernability (through sharing our own struggles) to connect with Ebony and create a spontaneous culture of inquiry that resulted in a loving and excited exchange of energy as Ebony honed in on her own research design. With a singluar focus on Ebony, Maria and I also demonstrated Noddings' practice of engrossment, showing her our full attention

and support through truly listening, caring, and wanting to help her move closer to her expressed goals. By the end of the clip, we are all overjoyed with the amount of progress we have made in 13 minutes!



https://youtu.be/KzFvyceTngI

**Significance**

The theme for AERA is centered around *Cultivating Equitable Education Systems for the 21st Century* and asks conference attendees to consider how their own work can contribute to a better understanding of equitable education systems. The presidential address further asks us to consider the following:

> Creating systems that honor the full range of ways of knowing and developing, and of student needs will be key. This will require providing widespread access to transformative teaching and learning; creating learning spaces that respect the humanity and brilliance of all students and support them in developing their full potential; providing experiences rooted in respect for the cultural, emotional, and identity-related nature of learning; and preparing young people and adults to imagine and create a more just and sustainable society.

I believe it is important for all attendees to consider these ideas from the lens of their own contexts and contribute actionable ideas on both the micro and macro level. Confucius reminds us that, "The man who moves a mountain begins by carrying away small stones." Tackling inequity within education is indeed a mountain, but every educator can look within their own classroom and choose how to address the small stones of inequity that lie before them.

Within my own context of online learning, I see the challenges presented by the virtual medium leading to inequity in learning. Without a physical connection or the ability to feel the exchange of loving energy from your teacher, online students can be left isolated, and the pedagogy can easily slip into an execution of tasks as opposed to a pedagogy of care. Why is this significant? What is the impact this has on our students as humans? Freire (1998) reminds us that:

The climate of respect that is born of just, serious, humble, and generous relationships, in which both the authority of the teacher and the freedom of the students are ethically grounded, is what converts pedagogical space into authentic educational experience (p. 86).

According to self-determination theory, there are three psychological needs that are universally important to psychological well-being and autonomous motivation: relatedness, competence, and autonomy. The notion of relatedness, or the need to be connected to and valued by others in a social setting, can be a challenge to create in an online setting yet it may be the key to building an equitable and meaningful learning experience. Niemiec and Ryan (2009) further explain how building relatedness is deeply connected to the relationship between the student and the instructor.

People tend to internalize and accept as their own the values and practices of those to whom they feel, or want to feel, connected, and from contexts in which they experience a sense of belonging. In the classroom, relatedness is deeply associated with a student feeling that the teacher genuinely likes, respects, and values him or her. Students who report such relatedness are more likely to exhibit identified and integrated regulation for the arduous tasks involved in learning, whereas those who feel disconnected or rejected by teachers are more likely to move away from internalization and thus respond only to external contingencies and controls (p. 139-140).

This aligns with the call from AERA to "create learning spaces that respect the humanity and brilliance of all students and support them in developing their full potential" and highlights that this should be more than just a goal or mission of educators but should be the foundation that all other pedagogical decisions are built from.

The ideas discussed in this paper are focused on creating equity in online learning, however, I would argue that the significance in these ideas and the true goal is to create equity-minded humans through modeling what authentic caring and love can look and feel like. A classroom is an opportunity to teach and learn, but it is not limited to academic content. Repeatedly, research tells us that the relationship between teacher and student is a powerful conduit for learning. Yet, we push the content to the top of our priority list as educators and think about our connection to students as an afterthought. My own core values and mission as an educator ask me to consider "connection first, content second" in my decision-making and the data shared in this paper illustrate that online students are asking for similar consideration. They want to see evidence of investment, opportunities to connect,

and loving communication from their instructors. And, yes, this will lead to a better educational experience, but I believe that this is also a roadmap to model a better human experience of connection. The Dalia Lama tells us that, "For change to happen in any community, the initiative must come from the individual" so the challenge for each educator is reflect honestly on how they are showing up for their students and modeling equitable relationships with their students in their own classrooms.

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