Rabinowitz, L., & Tondreau, A. (2022). Fostering culturally sustaining practice and universal design for learning: Digital lesson annotation and critical book clubs in literacy teacher education. *Contemporary Issues in Technology and Teacher Education*, *22*(1), 26-62.

# Fostering Culturally Sustaining Practice and Universal Design for Learning: Digital Lesson Annotation and Critical Book Clubs in Literacy Teacher Education

<u>Laurie Rabinowitz</u> Bank Street College of Education

Amy Tondreau
Austin Peay State University

Supporting novice educators in developing culturally sustaining and universally designed literacy practices, which are also socially situated and contextual, can seem challenging in online learning environments without access to classrooms. This study sought to understand how novice educators developed literacy teaching practices infused with culturally sustaining pedagogy (CSP) and universal design for learning (UDL) in an online learning environment. The authors used the P+E Framework to support the conceptualization of social presence, teaching presence, and cognitive presence in an online graduate elementary literacy methods course. While all three forms of presence were necessary in the course, social presence and teacher presence needed to be frontloaded and intentionally cultivated to support the type of cognitive engagement necessary for UDL and CSP informed literacy instruction. Additionally, elements of UDL modeled through course design served as a secondary layer of learning that participants were able to notice and name without explicit teacher presence. Implications for teacher education are discussed, including how high-touch online literacy methods courses should model the bending of curriculum toward learners.

With the move to online instruction necessitated by COVID-19, teacher educators have grappled with adapting methods courses – which, by their nature, focus on practices situated *in classrooms* – to an online environment. Supporting novice educators in developing culturally sustaining and universally designed literacy practices, which are also socially situated and contextual, can seem impossible without access to classrooms. Teachers need to know their students, bend curriculum toward them (Minor, 2018), and critically reflect. While some opportunities are lost without access to physical classrooms, leveraging asynchronous and small-group synchronous learning opportunities allows for new possibilities.

In an online learning environment, synchronous activities, defined as live-streaming audio or video with instantaneous feedback, typically are conducted with a whole class at the same time. However, since synchronous whole-group instruction can produce screen-time fatigue, being able to teach in this format is often significantly limited or absent entirely. Asynchronous activities (which we define as independent activities students complete individually when a faculty member is not present) and small group synchronous activities, (which require small groups of two to six students to meet at a time and for a duration of their choosing without the faculty member) offer unique affordances.

Using asynchronous structures opens up possibilities for students to work at different paces from one another, to take the time that they need to complete a task, allow for deeper content engagement, and to reduce the pressure to conform to or compete with other learners (Watts, 2016). Another affordance of asynchronous structures is that, when crafted using teaching videos, they can help students to strengthen theory-practice connection and help them transfer their learning from teacher preparation into classroom practice.

Research has found that too often novice educators "revert to intuitive theories of teaching and learning that correspond with their own experiences in school rather than with the research-based knowledge from their teacher education program" (Blomberg et al., 2013, p. 91). Using teaching videos can support newer teachers in learning new practices in a way that feels manageable and gives a window into a classroom without the pressure of having to react in real time.

While asynchronous learning can have these significant benefits in reconceptualizing time, it can also result in drawbacks. Specifically, it can result in the loss of a sense of community (Brown et al., 2016; Watts, 2016), which is essential for the potentially challenging or sensitive conversations about race and ability (Ahmed, 2018; Singleton, 2005). Further, courses that focus on developing professional practices, such as teacher content method courses, require additional consideration for instructional design. These courses, which are sometimes referred to as "high-touch" (Johnson et al., 2019), need to be interactive, allowing students opportunities to practice performance and receive feedback, rather than exhibit understanding of content through more traditional asynchronous methods, such as discussion boards and quizzes.

The study reported in this article sought to determine how teacher education graduate students developed literacy teaching practices informed by culturally sustaining pedagogy (CSP) and universal design for learning (UDL) in an online learning environment. We explored the affordances of asynchronous structures such as digital annotation and video-recorded small groups in a literacy methods course. We investigated how these activities may have been leveraged to support novice educators in developing teacher noticing and critically reflective practices that informed culturally sustaining and inclusive approaches to teaching. While these asynchronous activities were necessitated by the global pandemic, we also sought to understand if any of these practices should be maintained and why.

The research questions for this study were as follows:

- How do novice teachers describe the affordances and challenges of virtual learning experiences on developing CSP and UDL informed literacy teaching practices?
- How did novice teachers operationalize their learning and understanding of culturally sustaining and universally designed literacy instruction in asynchronous virtual assignments and small group synchronous experiences?
- What role did the digital assignment format afford us as insights into literacy educator learning about CSP and UDL?

Benefits were found both for students and the instructor in engaging in asynchronous digital lesson annotations and small group synchronous books clubs. For students, these online learning tasks provided opportunities to develop a transferable process for critically reflecting on literacy teaching methods from both a teacher and learner perspective. Being able to access all students' in-process thinking allowed the instructor to more carefully track student learning and adjust instruction to meet student needs.

In the following section, we situate our understanding of literacy within a sociocultural framework to describe both how the literacy methods course framed literacy instruction and how we made sense of the literacies of the novice educators who took part in the study. Then we describe culturally sustaining pedagogy (Paris, 2012; Paris & Alim, 2014) and universal design for learning (Nelson, 2013; Rapp, 2015) as pedagogical approaches that align with a sociocultural approach to literacy.

Next, we describe our conceptual framework by outlining the Presence + Experience (P+E) Framework for Online Course Design (Dunlap et al., 2016), which supports the development of interactive experiential learning activities designed to incorporate high touch learning experiences into high tech teacher education methods courses (Johnson et al., 2019). In the subsequent section, we describe our methodology for data collection and analysis. After that, we present our findings regarding social presence, teaching presence, and cognitive presence in the course, highlighting how the P+E Framework clarified both opportunities and challenges for students developing literacy practices associated with CSP and UDL in the course. Finally, we a discuss implications for literacy teacher education.

#### **Theoretical Framework**

This study was grounded in a sociocultural orientation to literacy, which is an overarching approach to understanding concepts of what it means to read and write. CSP and UDL are pedagogical tools that align with and support the practical implementation of a sociocultural understanding of literacy. These asset-based approaches informed the design and implementation of the course, the content taught within the course, the participants' work in the course, and the data analysis of this study

#### Sociocultural Approaches to Literacy Learning

In a sociocultural approach, literacy is understood as grounded in the authentic ways that individuals read and write in their everyday lives. It positions literacy practices as varied and multiple (Meier, 2015). New literacies, a contemporary form of sociocultural literacy, depart from traditional notions of what literacy means, is, and can do. Specifically, print literacy is "only one form of representation and meaning-making among many – one that has been, and continues to be, privileged above other forms in schooling" (Perry, 2012, p. 59).

Using new technologies and new social practices, such as holding meetings over video conferencing platforms like Zoom, using a parallel chat function while in a video chat, creating digital annotations, and navigating learning management systems (LMS) such as Canvas, illustrate the changing social practices that require new and significantly diverse and varied literacy skills of online teaching and learning. In using a new literacies orientation to teaching the content of a literacy methods course, modeling this orientation through our own teaching practices becomes essential, including how students engage with one another, with faculty, and with content.

#### **Culturally Sustaining Pedagogy**

CSP is a framework that seeks to "sustain linguistic, literate, and cultural pluralism as part of the democratic project of schooling" (Paris, 2012, p. 93) and builds on the work of culturally relevant pedagogy (CRP). Ladson-Billings (1995) defined CRP as "a theoretical model that not only addresses student achievement but also helps students to accept and affirm their cultural identity while developing critical perspectives that challenge inequities that schools (and other institutions) perpetuate" (p. 469). The model identifies three areas of focus for teachers: academic success (instead of behavior and classroom management), cultural competence (instead of cultural assimilation), and sociopolitical consciousness (rather than school-based tasks with no out-of-school application) (Ladson-Billings, 2014).

CSP maintains the tenets of CRP and extends them by calling for a focus on multiple identities and cultures, emphasizing hybridity, fluidity, and complexity. CSP requires a simultaneous commitment to "embracing youth culture's counter hegemonic potential" (Paris & Alim, 2014, p. 85) as well as supporting students in reflecting on their cultural practices to identify what is emancipatory and for whom and what is oppressive in

those movements. CRP/CSP shift, change, and recreate "instructional spaces to ensure that consistently marginalized students are repositioned into a place of normativity" (Ladson-Billings, 2014, p. 76).

#### **Universal Design for Learning**

Similar to CSP, UDL is an approach to designing curriculum that purposefully addresses the needs of diverse learners from the outset. This approach contrasts with traditional literacy curriculum development, which considers "typical" students first and then retrofits adaptations or differentiates for students of differing needs and goals (Rapp, 2015). Instead, both UDL and CSP forefront student diversity as a foundational pillar in curriculum design.

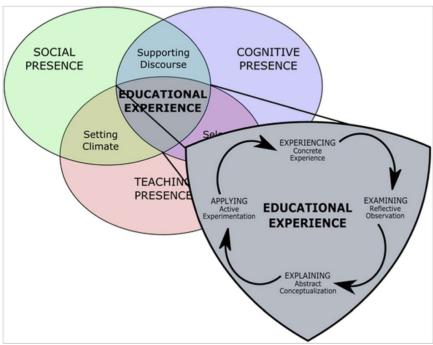
Based on nearly 30 years of neuroscience research, UDL is a framework developed to support teachers in attending to content, resources, and the learning environment. UDL is organized around three principles that support instructional design: engagement, representation, and action and expression (Center for Applied Special Technology [CAST], 2018). According to Hall et al., (2012), these UDL principles "map onto three groups of brain networks — recognition, strategic, and affective networks — that play a primary role in learning" (p. 2). The first principle of a UDL, providing different methods of *engagement*, aims to activate the affective network of the brain or the why of learning. The second principle of UDL. providing multiple means of representation, is designed to activate the recognition network of the brain or the what of learning. The third principle of UDL, providing multiple means of action and expression, aims to activate the strategic network of the brain or the how of learning. By attending to all three of these principles, barriers to learning are reduced and access to content is increased.

#### **Conceptual Framework**

#### Presence+Experience: A Framework in Online Courses

The P + E Framework (Figure 1) developed by Dunlap et al. (2016) is a socioculturally oriented tool for developing online courses that include "a high-level of interpersonal connection, such as courses in education, counseling, [and] social work." Research has found that course designers who use this framework to design online learning environments are able to develop "high-touch" content needed for methods courses in an online environment (Johnson et al., 2019) and to foster "safe spaces in which [preservice teachers] can engage in teacher noticing and develop high leverage STEM teaching practices through rich, multidimensional experiences" (Verma et al., 2015, p. 378).

**Figure 1** *P+E Framework* 



Reprinted from "Presence + experience: A framework for the purposeful design of presence in online courses," by J.C. Dunlap, G. Verma, & H.L. Johnson, 2016, TechTrends, 60, p. 145-151. (https://doi.org/10.1007/s11528-016-0029-4)

#### Community of Inquiry Model

The P+E framework combines two preexisting frameworks, the Community of Inquiry (CoI) model (Garrison et al., 2000) and Kolb's (1984) experiential learning cycle. The CoI model "emphasizes educational interactions involving cognitive, social, and teaching presence in order to engage students' meaningful conceptual processing and critical thinking during online learning" (Dunlap et al., 2016, p. 145). In considering the social context for online learning, this model takes a sociocultural view of learning and knowledge, which aligns with the teaching philosophy of the graduate school where this study took place.

The CoI model engages students and teachers in community-oriented interaction to build knowledge and establish positive student-to-student and student-to-teacher social interactions in an online environment through a balanced attention to teaching, social, and cognitive presence. Teaching presence refers to the instructional decisions made to structure and organize the course and the interactions between students and the instructor, the content, and other students.

Social presence is "the strategies people use and the activities people engage in — using various asynchronous and synchronous communication tools — to minimize transactional distance and help students and faculty feel more involved, engaged, and real in online courses" (Dunlap et al., 2016, p. 146). Lowenthal and Dunlap (2020) found that social presence is

best established through small groups and called for additional research on how social presence is influenced by grading, communication styles, and task relevance.

Finally, cognitive presence is the relationship between students and the content of the course, specifically the activities and assessments that cognitively engage students in learning. Cognitive presence can be supported by both teaching and social presence.

#### **Experiential Learning Cycle**

CoI on its own does not provide guidance on how to design the social engagement elements of an online course (Garrison & Arbaugh, 2007). To provide more clear recommendations for how to design instruction, Dunlap et al. (2016) recommended drawing on Kolb's (1984) experiential learning cycle. According to Kolb, learning is "the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience" (p. 41). Kolb's model consists of four elements: concrete experience, reflective observation, abstract conceptualization and active experiences in an online course by promoting both engagement and authentic cognitive processing. In combining Kolb's learning cycle with CoI to create P+E, Dunlap et al. (2016) argued that

the experiential learning cycle can be used to inform teaching presence (and ultimately social and cognitive presence) by prescribing a systematic approach for considering (a) the design and organization of learning experiences; (b) the design and facilitation of student-to-student, student-to-instructor, and student-to-content interactions; and (c) the design and delivery of content/discipline specific instruction. (p. 147)

#### **Teacher Noticing**

One key element of teacher education that the P+E framework supports is the development of descriptive and interpretive teacher noticing. A well-researched concept in teacher education, teacher professional noticing "refers to the interpretation of a teaching situation for a particular purpose" (Johnson et al., 2019, p. 161). The literature makes a distinction between more descriptive forms of teacher noticing and more interpretive components to professional noticing (Sherin & Han 2004). Interpretive analysis, which requires interpretation and sensemaking and using what is observed to draw inferences, is challenging even for experienced teachers (Barnhart & van Es, 2015).

Online courses allow teacher educators to "leverage innovative video technologies to promote teachers' noticing" (Johnson et al., 2019, p. 161). Blomberg et al. (2013) argued that video use is effective in connecting theory and practice and developing professional noticing, and they described five research-based heuristics for doing so: identifying learning goals, selecting appropriate learning activities to align with the goals, selecting an appropriate video to meet the learning goals, considering the

strengths and limitations of the video selections, and aligning assessment methods to video use.

The empirical literature typically offers limited information on the design guidelines for video usage (Blomberg et al., 2013; Johnson et al., 2019). In what follows, we address this need by providing significant detail on how assignments were structured to foster novice teachers' engagement with videos during online instruction in an interactive way.

In utilizing the P+E framework, our study investigated how our graduate student participants developed teacher noticing in their analysis of literacy instruction through the lens of UDL and CSP. While previous studies have provided insight into ways to translate high-touch methods courses to an online context, the sociocultural elements of literacy instruction, including consideration of context and ideology, are not fully investigated in the preexisting research on the application of the P+E framework.

The body of literature is grounded in the science, technology, engineering, and mathematics (STEM) fields, which treat teaching methods and practices such as assessing students as neutral (e.g., Johnson et al., 2019; Verma et al., 2015). Our work adds to the literature by exploring how this framework can be applied to literacy methods courses that frame teaching as political and ideological.

#### Methods

#### Context

This study took place at a small graduate school of education located in a large Northeastern US city. Participants were drawn from a graduate class on literacy methods for upper elementary grades taught by the first author (Laurie) during the fall semester of the 2020 academic year. Due to the ongoing COVID-19 pandemic, the course was redesigned to teach on-the-ground graduate students in a remote learning environment.

This course typically falls toward the beginning of a multiyear graduate program. The course emphasizes CSP and UDL as central orientations for literacy instruction. When the course moved online, it was essential to maintain the focus on these frameworks and ensure that the assignments were leveraged to support that focus. In particular, the course itself modeled the content that was being taught. Given that many of Laurie's students were also shifting their instruction of elementary students online, her course design became an opportunity to model how teaching online could work in service of CSP and UDL, rather than as a barrier to them. Demonstrating that the theories and beliefs guiding her instruction could be maintained regardless of the teaching environment was important.

#### **Participants**

Students in the course were enrolled in a variety of education majors, including elementary special education and general education. The majority of students held roles in classrooms such as teaching assistants,

paraprofessionals, or teachers at independent or charter schools. Participants for this study included three students from a class of seven. Participants were asked to describe their identities during interviews. Table 1 provides a summary of that information. All names are pseudonyms. One participant was a one-to-one paraprofessional in a public high school, one was a teaching assistant in an independent elementary school for students with language-based learning disabilities, and one was a teaching assistant in an independent elementary school. They were all enrolled in the Special Education/General Education dual-degree program.

**Table 1**Participant Description

Name	Gender	Race/ Ethnici ty	Age	Teaching Context	Years Experience	Graduate Program of Study
Sabrina	Female	White, Egyptian and Muslim	27	Upper Elementary School Assistant Teacher, Independent School	4	Childhood Special Education/ General Education Dual Degree
Beth	Female	White	26	High School Para- professional, Public School	2	Childhood Special Education/ General Education Dual Degree
Jessie	Female	White and Jewish	30s	Upper Elementary School Assistant Teacher, Independent School for Students with Learning Disabilities	2	Childhood Special Education/ General Education Dual Degree

#### **Data Generation and Collection**

Over the course of the semester Laurie engaged her graduate students in a variety of learning tasks to engage in teacher noticing, where they looked for and applied elements of UDL and CSP in literacy teaching practice. While these concepts were explored at first during course reading and synchronous class times, students had opportunities to deepen their understandings and apply them to literacy teaching methods during asynchronous and synchronous small group work.

In this study, we focused on three major asynchronous and small group synchronous tasks that students completed throughout the semester. The first was a digital annotation of a shared reading or interactive read aloud. The second and third tasks were video recordings of small group critical book club meetings. Each task was structured so that students first read about the teaching structure, then discussed the practice during synchronous class time, and finally applied their learning through the asynchronous and synchronous small group tasks.

## Digitally Annotating an Interactive Read Aloud or Shared Reading

Working with a partner or independently, students were invited to select a publicly sourced interactive read aloud or shared reading lesson or record one from their own teaching context. Students were directed to draw on specific readings from the course to inform their viewing of their selected lesson and to take notes using guided questions as they watched. Specifically, students were prompted to engage in descriptive noticings of teacher actions, student actions, and the literacy learning taking place. In addition, guided questions prompted more interpretive noticings, like access points for emergent bilingual students and students with disabilities and consideration of student identities (see Figure 2 for assignment directions from Course Canvas).

Unlike other iterations of video analysis present in the literature, which have asked students to write a reflection on the lesson they analyzed, Laurie invited students to utilize <a href="Loom.com">Loom.com</a> to rewatch the video and determine stopping points at critical moments to pause, rewind, rewatch, and reflect. Students were required to pause the clip at least seven times and record themselves offering commentary and insights, using their notes to help them articulate their thinking. While students were given points in their final grade for completing this task, the task itself was ungraded; all students who completed the task with accuracy received full credit.

In preparing students for this task, Laurie made a short video clip, in which she talked through the directions for the task and showed students how to access Loom. She then pulled up a video lesson and modeled how to go about annotating it, so that students could see and hear what the activity would entail. See Figure 3 for a screenshot of Laurie modeling and see Figure 4 for a screenshot of a student annotation.

## **Figure 2**Digital Annotation Assignment Directions on LMS

Extended Learning 1: Annotating an Interactive Read Aloud or Shared Read

Extended Learning 1: Annotating an Interactive Read Aloud or Shared Reading

Lesson

Due Oct 15 by 11:59pm Points 5

Submitting a text entry box, a website url, a media recording, or a file upload

Extended Learning 1: Annotating an Interactive Read Aloud or Shared Reading Lesson

For this task, you may work alone or with a partner. You will choose a teaching video of an educator delivering either an Interactive Read Aloud or a Shared Reading. You may choose from one of the examples that I have listed below, or identify your own example that you wish to watch. If you would like to record an example from your own classroom (either of you teaching or a mentor teacher), you may do that as well.

Second Grade Fiction Interactive Read Aloud (Watch beginning at 17:06.) &

Fifth Grade Nonfiction Interactive Read Aloud &

Sign-up here e to indicate whether you will be working alone or with a partner and which clip you will be analyzing.

For this task, you may work alone or with a partner. You will choose a teaching video of an educator delivering either an Interactive Read Aloud or a Shared Reading. You may choose from one of the examples that I have listed below, or identify your own example that you wish to watch. If you would like to record an example from your own classroom (either of you teaching or a mentor teacher), you may do that as well.

Second Grade Fiction Interactive Read Aloud (Watch beginning at 17:06.) e

Fifth Grade Nonfiction Interactive Read Aloud &

 $\underline{\text{Sign-up here}} \, \underline{e} \, \text{ to indicate whether you will be working alone or with a partner and which clip you will be analyzing.}$ 

Then, watch the clip that you have selected alongside the readings that we have completed for Session 5. If you are watching a Shared Reading teaching moment, use Fisher, Frey & Lapp (2008) to guide your analysis. If you are watching an Interactive Read Aloud, use Fisher, Flood, Lapp, & Frey (2004) and Kesler, et al. (2019) to guide your analysis. As you are watching, take note of how you see the literacy learning clip that you have selected structured. Use the following questions to guide the notes that you take.

- What happens first?
- What happens in the middle?
- What happens in the end?
- What are the teacher actions?
- What are the student actions?What literacy learning is taking place?
- What are the moments of access for emergent bilingual students and students with disabilities?
- Are there connections made to student identities?
- What questions would you want to ask this educator?
- In what ways could this literacy learning moment be improved? Why?

When you are done taking your notes, rewatch the clip playing it as you record in a screen recording application such as Zoom or Loom (loom.com). Pause the clip at the moments that you took note of in your written record and share your thinking. You should pause the clip at least 7 times to share you analysis.

End your video with a few minutes of reflection. Consider the following two questions for this reflection.

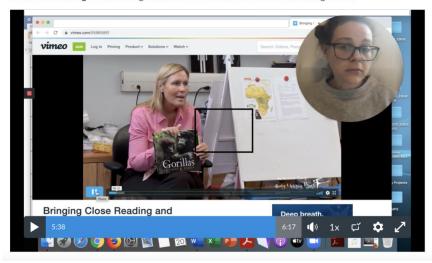
- What have you learned by closely analyzing this clip?
- What will you take away for your own teaching practice?

Think of this task as an in-class style thinking assignment to enhance your understanding of course readings and discussions. This task is worth 5 points and will be graded P/F. If it is submitted to completion and demonstrates effort in making sense of the video clip, you will receive full credit.

#### Figure 3

Screenshot of Laurie Modeling Digital Annotation for "Bringing Close Reading and Accountable Talk into an Interactive Read Aloud of Gorillas (3-5)"

**Extended Learning 1:** Annotating an Interactive Read Aloud or Shared Reading Lesson



**Figure 4**Screenshot of Sabrina's Digital Annotation for "Second Grade #4 - Reading Workshop and the Interactive Read Aloud"



#### Critical Book Club Meetings

For the next assignment, Laurie had her students participate in Critical Book Clubs. She provided them with the 2020 Project LIT book selections (<a href="https://twitter.com/projectlitcomm?lang=en">https://twitter.com/projectlitcomm?lang=en</a>; a variety of diverse middle-grade and young adult literature listed on Twitter) and asked them to select a book of their choice and sign up for a group of three to five peers. Several weeks prior to the book club meetings, she asked students to read the directions for the assignment, watch the video explanation, submit their questions, email their group members, and schedule their appointment to meet. Students also engaged in readings on the topic of social justice book clubs and picked a midpoint at which to stop reading in the book prior to their first meeting. Laurie's directions were provided both in writing and through a short video.

The students' first group meeting was an approximately 40-minute discussion with guidelines and prompting questions. This first meeting was intended to illustrate for students what a productive literacy grade-level team meeting could look like. The overall focus was on understanding the literacy content of the book, such as the characters and plot. The students' second meeting focused on criticality and encouraging students to have agency in preparing for and participating in their own book clubs. Rather than providing students with a structure, students were asked to read an excerpt on social justice book clubs (Cherry-Paul & Johansen, 2019) and create their own structure (see Figure 5 for a screen shot of the directions).

Data collection included asking participants to provide copies of their digital annotations and video recordings of critical book club meetings. These materials were transcribed for analysis. In addition, each participant participated in a conversational interview of 60-90 minutes conducted by Laurie via the online platform Zoom. The second author (Amy) completed field notes during each interview. After data collection and analysis, participants were invited to optionally read the analysis conducted by investigators and contribute additional thoughts on how they are represented in the data. They were invited to clarify points, add on to ideas or provide feedback for revision. Table 2 shows a data generation and collection timeline.

#### Figure 5 Critical Book Club Assignment Directions on LMS





have all read up to the same point of the text before you meet

Before class on 11/5, meet with your bookclub via Zoom to discuss your reading. Make a record of your discussion by video taping. Upload your video-recorded discussion to Canvas. This recording should be roughly 40 minutes.

Use the following prompts to guide your book club discussion.

#### Part 1: (10 minutes)

- Share your general reactions to what you have read so far.
- What did you like? What confused you? How do you think students might react to the text?
   What connections did you have to the text? What disconnections did you have from the text?

- Find the 2-page spread in the Serravallo (2018) text that corresponds to the book that you are reading. For example, a level W Fiction book would be found on pp. 80-81. An image of this is found here  $\underline{\downarrow}$ .
- · Re-read the characteristics of a text on that level.
- Choose 2-3 "Look for" bullet points to discuss about the text that you have read. For example, on a Level W text you might choose the following "Look for" found in the Character box on p. 80.
- o "Identify and interpret several less obvious traits and/or feelings of a main character that reveal their complexity, and analyze relationships between characters."
- Have a discussion where you try-out doing the skill for each bullet point.

#### Part 3: (10 minutes)

- Reflect on what you identified in the text.
  - o How did this process help you to teach into a text at this level?
  - How might you might you use this process moving forward in your own preparation for teaching a text?
     What points of critique do you have about this process?

  - o Where did/can identity fit into thinking about books in this way?

This will be graded pass/fail. Attendance and active discussion participation will be awarded full credit.

**Table 2**Data Generation and Collection Timeline

Data Point:	Fall 2020	Spring 2021	Summer 2021
Digital Annotation	October 2020		
Critical Book Club Meeting 1	November 2020		
Critical Book Club Meeting 2	December 2020		
Interviews		May 2021	
Member Checks	9		June 2021

#### **Data Analysis**

Our goal in data analysis was to understand how novice elementary school teachers described their experiences of asynchronous virtual and small group synchronous activities, as well as the ways in which they connected theory and practice in literacy instruction. Data analysis consisted of two rounds of qualitative coding. The first was deductive coding (Bingham & Witkowsky, 2022) using the lens of the P+E Framework to determine the preexisting codes. The second was analytic, inductive coding (Richards & Morse, 2013) to identify themes using CSP/UDL as a lens. According to Richards and Morse, analytic coding aimed at "opening up data" to identify ideas and concepts (p. 159).

Together, we created a codebook for each term for deductive coding, including the name of the code and examples of the code from the dataset. To ensure validity, each author coded individually using the code book before we came together to discuss any examples that we were uncertain of, and then we worked to consolidate and refine our coding to establish agreement. The <a href="appendix">appendix</a> shows our codes with examples from the dataset.

### **Findings**

Analysis of the asynchronous tasks, small group synchronous tasks, and interviews with participants suggest that cognitive presence (or the relationship between the students and the content) was dependent on the way that teaching presence and social presence were established. What allowed for rich cognitive presence in tasks such as critically reflecting on teaching practices and materials were the interactions between students (social presence) and the instructional decisions that Laurie made to structure and organize the course (teaching presence). In addition, we noted how students' differing experiences and background knowledge of UDL and CSP allowed some students to engage cognitively with these topics more readily.

Furthermore, to engage in particularly sensitive, thoughtful cognitive work, like critically analyzing how race is represented in a teaching video or text, setting the climate through social and teaching presence was essential. Given how this type of deep cognitive engagement was new to novice educators, the role of the instructor to establish positive, clear, and consistent teaching presence and support students in having positive social engagement was especially important.

Small class size also seemed to play a significant role in fostering social engagement. Data suggested that getting to a place where you can have deep cognitive engagement to explore CSP is particularly challenging to do in an online teaching environment, where the technology can unintentionally mediate interactions. In previous work with the P+E Framework, cognitive, social, and teaching presence were positioned as equally important (see Figure 1). In courses where issues of racial, linguistic, and ability/disability equity are centered, however, social and teaching presence need to be frontloaded before critical cognitive engagement can develop.

Next, we discuss how social, teaching, and cognitive presence were fostered through the asynchronous and small-group synchronous tasks in this literacy methods course. For each type of presence, the opportunities and challenges are identified. We also highlight how these opportunities could be strengthened in future iterations or other contexts.

#### **Curating Social Presence**

Findings suggest that *authentic* online social presence was a foundational element for students' successful engagement with integrating UDL and CSP into literacy instruction. Participants named learning from one another (social presence) as a primary goal of their master's programs, because they believed that diversity of thought and multiple perspectives could inform their own learning – a fundamental underpinning of asset pedagogies (e.g., CSP and UDL). However, their prior experiences with social presence in online courses were predominately negative, because those experiences had only offered the participants opportunities to share their own perspective, not to learn from the perspectives of others.

For instance, Sabrina highlighted how she had little to no interaction with other students in an online science course: "I had to babysit and wait for someone to make a response and then to get credit to respond to something someone said...it was more passive." For Sabrina, the concept of "babysitting" was not a way to engage authentically with the diversity of her peers' thinking in an online space, because the requirement to post back was not derived from an authentic conversation point, but rather an artificial interaction. Conversely, several components of the design of this course fostered the more authentic student social presence necessary for UDL and CSP informed literacy instruction.

## Facilitating Culturally Sustaining Literacy Pedagogy Through Social Presence

One of the factors that fostered the kind of social presence needed to engage meaningfully with CSP is class size. For example, Jessie said, "We ... had a small class ... everyone was sort of more involved.... You can't really hide in a small class. It was nice that you couldn't hide, because then you got to really hear from everyone." Jessie's comment suggests that the small class fostered social presence because everyone was encouraged to speak. The findings suggest that this feature led to the inability to opt out of difficult topics – something that is common for White people to do when talking about race (DiAngelo, 2018).

The small class size also meant that challenging conversations did not feel as public. Beth, who identified as a shy person said, "It's just more intimate conversations or discussions. Even though I didn't participate like an overwhelming amount ... [the class size] encouraged me to participate." One element of CSP suggests that educators should foster students' cultural competence across more than one culture, which means that they need to be able to talk across differences (Ladson-Billings, 2021). The small class size allowed Beth a practice space to talk with others who have different backgrounds and experiences than one another.

The participants highlighted the importance of learning from *everyone* in their class. Particularly in this past school year, when our participants were not able to visit other classrooms, they sought to hear about their peers' classrooms, specifically.

Another factor that fostered the social presence needed to engage with principles of CSP in literacy instruction was the development of a cocreated set of course norms, which took place across the first three class sessions. The norms were also made available to students on the agenda for each session as a reminder. Beth described the value of this process: "We came up with the list of norms in the very beginning of the semester. I think that definitely everyone, generally, stuck to that."

Relying on cocreated norms supported the development of interactions and relationships that built the community necessary to discuss challenging topics around race, ethnicity, and other identities in literacy instruction. Participants specifically referred to the fact that the norms helped to make expectations clear, equalize participation, and encourage equity of voice. This activity also modeled a process that could be replicated in elementary literacy classrooms. Through promoting equity of voice and ownership over the classroom space, all students can see themselves as literate individuals who are valued in the reading and writing community (Muhammad, 2020).

Similar to the benefits of small class size, the norms and relationships cultivated throughout the class sessions provided a foundation when students began to engage in more sensitive topics. Participants compared the experiences in Laurie's class to the challenges they experienced in other courses that derived from the way social and teacher presence were implemented.

This response reflects the literature on online learning environments, which indicates that engaging via technology changes the ways individuals interact; specifically, it is frequently cited that visual and auditory cues are less available in online interactions (Garcia & Baker Jacobs, 1999). For example, Sabrina explained how, in another online course, the mediation of technology interfered with having an authentic conversation about race in the following way:

I remember one time we had a conversation around race in a context of an article, and it was about reprimanding kids. I started to explain myself, and I remember a woman got angry and interjected and was sort of like, "That's not what I read." I didn't understand it, and it was extremely awkward because I didn't finish. She didn't hear the first part of what I said. So, when I had taken a moment to say, "Let me clarify," I remember her being like, "I didn't hear that." And, she admitted that there was a glitch and she didn't hear the full context, and that was very awkward.

In this instance, Sabrina highlighted how a technological glitch created a misunderstanding when discussing the already tricky-to-navigate topic of ways racial identity impacts classroom management, a conversation that requires deep cognitive engagement and emotional vulnerability. Social presence was hindered by technology, and as a result, the ability to engage in the cognitive work of critical reflection decreased.

Participants contrasted difficult experiences, such as the one Sabrina summarized, to course experiences in which prior relationship-building and norm-setting allowed for more productive discussions about race. For the small group synchronous book club meetings, for example, students were asked to determine norms for their groups asynchronously before their groups met. Sabrina described this process as "awesome," explaining,

We did a lot of talking on the email, like "We're going to do this," "These are the goals," "This is what we want to talk about," and that felt very fluid. ... Why that probably worked really well is because we just established, this is how we want the time to look or this is the expectation of what the video recording should be, and established group expectations before we met. ... I think it just supported us being able to navigate our work together productively.

Setting expectations for book club meetings, along with allowing students to choose their text and their group members, fostered a space for deep cognitive engagement with topics and texts centered on equity. Members of both book clubs reflected on the ways their conversations centered race and racism in productive ways. Beth shared that her group, which chose to read *From the Desk of Zoe Washington* by Janae Marks (2020),

kept talking about how race is definitely a huge part of that book. We kept talking about how it's so relevant right now, and how students who will read that book will get a lot about race from it, because of comments that the characters make or the comments that people made to the characters in the story. So that was a big theme.

Beth's reflection illustrates that not only did her group discuss race, they kept coming back to it in their conversations. Identifying it as a major theme of their group discussions, Beth indicated that they stayed engaged and did not shy away (as occurred in Singleton, 2005).

#### Facilitating UDL Through Social Presence

Findings also indicate that the social presence in the course facilitated students' learning about UDL in literacy instruction. Several components of UDL were modeled as a part of the class, and participants described how socially engaging in those elements fostered their understanding of how the principles could work in their own literacy classrooms. For example, the synchronous class sessions offered through Zoom offered a consistent opportunity for multiple means of action and expression during class.

A synchronous written dialogue using the chat function during the Zoom class meetings was sometimes instructor initiated and sometimes student initiated. This alternative space encouraged students to pose questions, share connections, and interact with one another during class time. Jessie reflected on this tool, saying, "I do really like having a chat open and available, I like when there's sort of an environment that endorses like, 'plus one,' or ... a concurrent conversation on the chat."

While multiple means of action and expression often requires additional planning for the instructor, the nature of the synchronous online platform used for this course already afforded students two methods for expressing their thoughts. This affordance could have implications for the platforms instructors choose for online teaching, as well as opportunities for integrating this type of parallel participation into on-the-ground teaching.

Flexible grouping aligns with the UDL components of optimizing choice and autonomy and fostering collaboration and community, which both support providing multiple means of engagement. Students' experiences with flexible grouping offered throughout the course provided the opportunity to experience UDL in their own learning. Participants expressed that often in their online courses groups were assigned rather than selected and were not reconfigured in flexible ways across class sessions. Jessie explained, "It's always a more robust learning experience when you get access to more of your colleagues and peers." She described a phenomenon she labeled as a "bifurcated class," which was when whole group and small group experiences repeat, using the same structure for the entire course. For Jessie, this type of experience was less engaging because the groupings and small group work did not feel meaningful. Jessie understood how UDL influenced her own learning experiences and named how having it modeled for her supported her ability to use the tool with her own students.

Similarly, Sabrina connected her experience in her book club to implications for her students; specifically, she considered that each of her students might bring different background knowledge and experiences to a text, as members of her own book club had. She realized the advantages of encouraging and supporting opportunities for peer interactions. She described the role of the teacher in assessing the different members of the

club and matching scaffolds to the needs of individuals. She explained taking different approaches to different students, "teaching into something or deepening someone's understanding or pushing their thinking by questioning, and how are you also supporting the students who know more."

Both Jessie and Sabrina highlighted that simply being arranged into small groups is not sufficient to achieve UDL in literacy instruction. The group work that they engaged in as learners needed to be meaningful, connected to course goals, and tailored to their individual needs.

Despite the benefits of flexible grouping in fostering social presence in this online learning environment and the value that our participants placed on peer interactions, students described needing more support in the providing options for executive functions area of UDL. For instance, they needed help with planning long-term small-group projects in which everyone participated equitably. Data indicated that challenges around scheduling small-group synchronous meetings were in tension with participants' understanding of the value of these interactions. As Beth explained,

That's something that I'm not a huge fan of, when we have to meet in smaller groups. It's just that we, as working teachers, we have ... other things going on. It's hard sometimes to schedule a time that works for everyone.

Beth's comments indicate that she prioritized learning the literacy content and completion of an assignment over the social presence cultivated through small-group synchronous tasks. This finding suggests that, while crafting tasks that facilitated the development of social presence was a priority for Laurie as the instructor, that priority may not have been clearly conveyed to the students or Beth valued cognitive presence over social presence.

Further, when given the opportunity to work with partners on their digital annotation tasks or to work alone, all of the participants opted to work alone. This result suggests that, despite their articulated desires to learn with and from classmates, they still favored the ease of organizing and managing solo work over the benefits of working with others. Supporting students in planning for effective group work can happen during class time with instructor presence. This would be an important step forward in fostering social presence during small group synchronous tasks. Especially since the work of full-time teachers has become increasingly more collaborative in recent years (MetLife, 2009; Ronfeldt et al., 2015), spending time to develop this skill set in a graduate course would be a valuable process to transfer to teaching practice.

Not only did scheduling pose a challenge to small-group synchronous tasks, there were also limitations to students' abilities to engage socially with one another during the meetings. Participants shared that during small group projects, ensuring that everyone in a group was fully participating was sometimes difficult. They felt tension between wanting to learn from their peers, but also not wanting to negotiate these

challenges. Sabrina had developed a set of skills that emphasized her prioritization of social presence in her own learning:

I feel much more prepared to step in and say, "This is what I'm thinking, these are the goals, or what do you think of using those kinds of questions?" to make group work. Or, starting in an email and being like, "This is what we need to do. I'm free this day, this day, what are you doing?" Versus like, "We should connect," and then leaving it open. It's much more directive about time. That has been my learning curve.

Sabrina's description suggests that she had developed the executive functioning skills to achieve her desire to learn in collaboration with others. While Sabrina had developed some of the skills of managing small group synchronous projects on her own, Beth still needed support in prioritizing these skills in order to further develop them. Offering class time to share common pitfalls that small groups face when meeting synchronously, then sharing strategies students found successful for working in groups (e.g., having a student like Sabrina share how she is structuring her small group synchronous work) could support all students in recognizing the importance of social presence and how to effectively cultivate it.

This type of sharing might also allow students who do not always contribute equitably to group tasks to hear how they are impacting the learning of other members of the community and begin to hold themselves more accountable. In effect, while we found that social presence in this course fostered opportunities for choice, autonomy, collaboration, and community during small-group synchronous tasks, opportunities still remain to support more effective collaboration in small groups in ways that might be transferable to students' own teaching contexts.

#### **Teacher Presence**

Participants named several aspects of teacher presence that provided them with examples of how to implement UDL in instruction. Organization of course content, access to information, and clarity of assignment directions were all highlighted as influential factors that contributed to their ability to engage with course content and, specifically, to complete small group synchronous and asynchronous tasks that required criticality and respectful conversation across difference. The findings also suggest that students were able to experience CSP-infused instruction fostered by teacher presence. Practices such as ungrading and incorporating aspects of youth culture were important elements that fostered engagement and decreased stress to make space for students to engage in deeper cognitive presence.

#### Modeling UDL Through Teacher Presence

Participants' reflections suggested that an intentional emphasis on the principles of UDL in the design of the Learning Management System (LMS) of the course supported their relationship with Laurie as the instructor of the course. Sabrina articulated that everything for the course

was conveyed through multiple modes of expression. More traditional written assignment guides were provided, alongside short videos in which Laurie explained assignments, modeling how to utilize any technology and how to approach any content that would be a part of the students' work. Agendas for class sessions were created as shareable online documents and hyperlinked to the modules on the LMS itself. Students had choice and agency in the ways they interacted with these alternatives. Jessie explained the effectiveness of these practices in setting students up for success as follows:

Talking through the assignment and then, very often, you would very explicitly model parts of the assignment. I remember you color coding written directions, too. I was sort of like, "If you miss this, that's on you!" You know?

As Jessie highlighted, Laurie ensured that she was facilitating students' management of resources, enhancing their capacity for monitoring their progress, and minimizing threats and distractions – all of which are important elements of UDL (CAST, 2020). Laurie also presented asynchronous tasks with estimated time frames; however, students were again able to choose their own pacing for these activities. All three participants mentioned in their interviews that they were able to take their time with these assignments and engage in a way that worked for them as learners.

One tool that students referred to as particularly helpful was a shared note-taking document (see Figure 6 for an example agenda). Everything that students would need for each weekly session was linked directly in an online Google Document, from videos to electronic slideshow presentations to articles and made available to students before class on the LMS. Room was left within the agenda for students to take notes on topics discussed.

Since all students had access to the document, they were able to alternate responsibility for notetaking, which, as some of our participants shared, decreased the anxiety of trying to capture all of the important information and allowed them to remain present and engaged in class activities and discussions. One added benefit of this approach was that it streamlined the online experience as students engaged in class activities. They did not need to toggle between several different tech tools – even those that originally seemed appealing or even purposeful – such as NearPod or PearDeck, Jessie named the advantages of this approach as having

everything in one place, I knew what the agenda was for class. I knew how we talked about the things that were on the agenda, and it cued me to go to my course reading so everything was contained, and I thought it was nice that different people took turns taking notes, sort of alleviated some of that load. Sometimes, I would take my own notes, too, but generally, I feel like I didn't, and it's really nice to have opportunities to sort of just listen, too.

**Figure 6** *Example Shared Agenda* 

#### Session 8

#### **Guiding Questions:**

- What are strategy groups and how can I structure them with my students?
- What is reading comprehension?
- What are the distinctions between teaching comprehension in fiction and nonfiction text?
- · How can I effectively confer with readers?

#### Strategy Groups Share-Out: (15 minutes)

Connect			
Teach			
Independent Work			
Coaching			

#### Turn and Talk: (5 minutes)

- How does this structure for teaching reading look different than guided reading, close reading and book clubs?
- When and how might you do this in your own classroom?
- · How does this type of instruction support inclusive teaching practices?

Share: (5 minutes)

In stripping back some of the technology tools, students felt more able to focus on the content of the course rather than the method of its presentation. While this practice is UDL-aligned, it is also CSP-aligned because it decentered the teacher and shared power in the course in a democratic way. Interviews with participants suggested that they recognized the UDL aspects of the practice, but not the CSP aspects of the same technique.

While teacher presence, including the intentional design and facilitation of learning experiences, is an important element in any online course, it is particularly essential for teacher education. Teacher education and methods courses, especially, are always operating on two levels: teaching content about methods and modeling those methods in action. Specifically, in this course, UDL served as a pedagogical method This modeling became course content alongside all of the literacy content that was being taught. Jessie named this aspect of teacher presence as a "secondary layer of learning, whereas, just like I am being exposed to a way to present material effectively, now in addition to the content, the presentation is something that I can also utilize." Students were able to describe the ways in which Laurie's organization and instruction of this graduate course could inform their own instruction in elementary classrooms. Jessie continued,

Last year I did a lot of instructional videos, but what I didn't do was make a video outlining an assignment, which in hindsight really would have helped some of my classes. I'm thinking about my math students. ... I would sometimes record myself reading ... but I never made a video of myself describing the assignment itself. I hadn't thought to do that ... but that was really helpful.

Students exhibited the ability to internalize and transfer the learning from this "secondary layer of learning" about UDL into their own practice, both in literacy and extending that learning to other content areas. Teacher educators need to be attentive to this (perhaps unintentional) instruction as they design their online courses.

## Modeling Culturally Sustaining Pedagogy Through Teacher Presence

One method that proved effective for establishing a meaningful teacher presence for students was the way that Laurie made her own identity present in the course by creating unpolished videos of herself. While not intentional at the outset of the course, this practice was necessitated by the conditions of the pandemic.

A first consideration is that Laurie filmed each video component of the course in real time across the semester; she did not draw on preexisting videos of other instructors or even her own prior videos. This experience contrasted with others shared by the students, in which online courses relied heavily on filmed lectures or where faculty members used preexisting lecture videos from other instructors to convey content.

Laurie created her videos in response to the students as she got to know them and in response to experiences within the course as it progressed. Small rhetorical moves, such as referring to a particularly memorable student comment or calling them by name, seemed to establish the salience, value, and authenticity of the videos. Making explicit connections between the ideas in the videos and ideas brought up in prior class sessions or mentioning a specific time and venue for the next class interaction at the end of the video seemed to build communication that felt relational and continuous, even when it was occurring asynchronously. The responsiveness and relevance of the videos exhibited that Laurie valued who the students were and emphasized an academic growth approach over content coverage, which Ladson-Billings (2021) named as a principle of culturally responsive teaching.

Videos were also created with the same norms as live teaching, meaning they were filmed in one take, and aspects like stumbling over words or pausing were maintained rather than edited out. In this way, Laurie's videos included modeling of concepts such as how to use Loom.com to create a digital annotation and expectations for assignments like the kinds of noticings students might discuss when viewing the video lessons.

This modeling set expectations for student work while simultaneously setting expectations for the type of virtual connection students would engage in. Laurie's videos set the tone for the interactions of the course. They were to be collegial but somewhat casual – a fact that was, to some degree, unavoidable in the midst of a pandemic, as students virtually entered Laurie's home and vice versa. Videos were produced to reduce student stress, but also drew on youth culture by mirroring some of the craft moves of YouTubers (e.g., "Comment down below!"); this element of instruction was highlighted by Paris and Alim (2014) as central to CSP.

The tone set by Laurie was mirrored in the type of videos the students themselves created when they produced their digital annotations. Rather than approaching the assignment as a more formal presentation of their knowledge, students approached it as a collaborative engagement in which they shared their thinking with a knowledgeable other. Throughout their videos, they incorporated a direct address to Laurie, as though they were entering into an ongoing conversation across videos.

For example, Beth said, "So for reflection, your first question, Laurie, was, 'What have you learned by closely analyzing this clip?" Her comment suggests that she believed she and Laurie had an ongoing relationship and that she expected Laurie to watch the video and continue their conversation through her feedback. This finding suggests an awareness of the ongoing authentic dialogue that supported her learning. In their videos, students greeted Laurie, asked if they had met her explanations, and ended, as Laurie did, with reference to when they might see her next. These comments indicated that, even though there was no explicit teacher presence during this asynchronous task, students perceived Laurie's presence because of the way the task was presented to them.

Several factors impacted this outcome in addition to Laurie's own videos. First, this assignment, along with the book club sessions were graded as pass/fail, where participants received points for completing the task, rather than an evaluation of *how well* they completed it. The practice of "ungrading," or any pedagogical practice that moves a student's focus away from grades and toward learning and growth, is another example of Ladson-Billing's (2021) emphasis on academic growth over content coverage in CSP.

Second, it is preferable to build rapport and relationship with students in synchronous interactions, either whole group or individually, prior to assigning a task such as the digital annotation assignment. While Laurie's videos presented discussion of the course content and course assignments as a part of an ongoing conversation about literacy instruction, students felt comfortable joining into this conversation with a connection already established.

#### **Cognitive Presence**

Students' cognitive presence was evident through their understanding of literacy teaching methods and their ability to discuss these methods as examples of both UDL and CSP. While still developing these skills, they worked to reflect critically on how racial, cultural, and ethnic identities were represented in literacy instruction and to analyze the accessibility of instruction.

## Noticing, Naming, and Interpreting Moments of UDL in Literacy Teaching Methods

Through multiple viewings of literacy teaching videos in their digital annotation task, participants were able to analyze whether instruction was made accessible to students with disabilities and to students who are emergent bilinguals. They noticed and named both moments where instruction included access points, as well as moments when instruction could be made more accessible. When they highlighted opportunities for more accessible instruction, participants were able to imagine and explain possible alternatives. Sabrina hypothesized how the educator in the teaching video she chose could have more fully considered the experiences of emergent bilinguals, students with attention needs, or students with auditory processing needs in pacing her instruction.

This would be a lot ... the amount of engagement, what they're asking them to do ... it could be really positive for students who need kind of a shift every once in a while. But, I think in terms of the "think time" ... she actually says, "Really quickly do this." When I, as an adult, hear, "Really quickly do this," I work much slower. So, I think that the prompting and the timing, though it's a short mini-lesson and it has to stick to the time frame ... [it] sticks out to me.

Sabrina demonstrated skill in weighing multiple teaching decisions with the individual needs of particular learners in mind. She recognized that the pacing of this literacy lesson may have been intentional to preserve the "mini" quality of the lesson, and she evaluated that choice alongside her understanding that the speed of certain aspects of the lesson may have made the literacy content less accessible for students who are learning English or students with certain disabilities.

The digital annotation assignment not only provided opportunities for participants to notice the teacher's moves, but also to notice and name the way that materials used in the lesson supported (or could support) accessibility. For example, Jessie described her understanding of the lesson materials she observed in her digital annotation as follows:

I'm noticing after a few watches that these two documents that are up on the white board next to where she's sitting are what the students have in hand. It seems like there's a little vocabulary word bank perhaps at the top of the sheet. ... It looks like there's certainly some information that the students can access and utilize during this read aloud.

The ability to watch the clip more than once and to pause and reflect offered Jessie the opportunity to think deeply about the purpose of the materials and how they might be used to provide students with increased access to the literacy content explored in the lesson. For Jessie, the COVID-19 pandemic during this academic year had given her reduced, if any, access to the classrooms of other educators to observe and learn from. The digital annotation allowed her to experience that type of observation. She explained,

I'm a super-new teacher, so it was just really useful to see how some of these ideas can happen in the classroom. It's one thing to read about a minilesson, but to see how the pacing of it, or see what the instructor is doing while giving the lesson, or just how the classroom is set up ... there's all these other things that you can learn lessons from besides what the mini-lesson is itself.

In disrupting the isolation of pandemic teaching, the digital annotation task invited Jessie into a more experienced teacher's classroom for a kind of asynchronous mentoring. She was able to use her rewatches to gather ideas and reflections for the assignment, as well as for her own developing teaching practice. The digital annotation task also offered an opportunity to observe a classroom with multiple lenses. As Jessie explained, in viewing the clip more than once, she was able to observe for literacy lesson structure and pacing, as well as other elements of instruction, such as accessibility and ways materials could facilitate inclusive instruction.

#### Critically Reflecting on Opportunities for CSP in Literacy Teaching Practices

Participants' abilities to analyze literacy instruction critically with racial and cultural lenses varied depending on the task and the participant. The critical book clubs lent themselves directly to conversations about the intersections of race and literacy since participants were directed to choose books with diverse characters and diverse authors. During their second book club meeting, two participants demonstrated an ability to re-revisit critically the narratives of texts that they read previously and reconsider the messages those stories were conveying. This example illustrates one of the key tenets of CSP: "critiquing discourses of power" (Aronson & Laughter, 2016, p. 167).

In the exchange that follows, Jessie highlighted how reading *Stamped* (Reynolds, 2020) encouraged her to reflect critically on her previous understanding of *To Kill a Mockingbird* by Harper Lee (2002):

When *To Kill a Mockingbird* was brought up as, like, the *Uncle Tom's Cabin* of the Civil Rights era, I was like, Oh \*\*\*\*... I feel like it had never occurred to me to consider it from a white savior lens. I feel like that also is very reflective of, "That's the toxic air that we're breathing." We are not socialized to challenge the things that we think, that we are consuming all the time, from an antiracist perspective. That is the new work, really.

Sabrina extended this conversation by connecting Jessie's criticality to teaching practice. She demonstrated an increased confidence to engage colleagues in conversations about how race is represented in young adult literature, as well as thoughtful consideration of the impact of text selection and class discussions on students of color. She responded to Jessie by describing her experience in an Analyzing Race and Pedagogy inquiry group at a school with a predominately White student and faculty population,

One teacher, a teacher for 30 years, was very upset that she was asked not to read that book [To Kill a Mockingbird] this year. And it sparked a huge conversation, and it was before this wave, antiracism at the forefront of our understanding as a cultural movement. But I found, as a new teacher listening, that the rhetoric that we continue to tell ourselves of why something is constructive is only as good as the walls that it lives in. So, who was it helping? Who's it hurting? You're teaching this book to a

bunch of White students. If you have a Black student in the classroom and [you're] asking them to be reflective of something, there's so much harm that can be done. ... I think about if I were there now, what would be different?

In this way, the book club meetings offered participants an opportunity to practice a key element of CSP, developing their critical consciousness or the "ability to critique the cultural norms, values, mores, and institutions that produce and maintain inequities" (Ladson-Billings, 1995, p. 162). By rereading her previous understanding of *To Kill a Mockingbird*, Jessie took a critical stance on the way that the White gaze portrays people of color. Sabrina was then able to connect this rereading to the institutional structure of school and suggest what role she, as an educator, may play in disrupting the canon of texts that are traditionally read in schools.

Despite the strength of these critically conscious conversations in the book clubs, participants were still developing their skill in noticing how race and culture were represented during literacy instruction. Sabrina and Jessie each made one critical comment about cultural and racial representation in the teaching videos that they annotated.

For instance, Sabrina began to question how the main character of *Dancing in the Wings* by Debbie Allen (2003) was described as "sassy" in both the text and the lesson video. Sabrina said, "[I'm]...thinking about what ways this is connecting to students' identities. I'm thinking about ... this one character, her being a Black character and [avoiding] being stereotypical, but also just describing that that's what that particular character is like." While Sabrina was able to identify the use of the stereotypical character trait of "sassy" as problematic, she did not offer alternatives for how the educator may have addressed this issue in the moment, or more broadly, taught the lesson using a CSP-informed approach.

Similarly, Jessie directly connected to Freire's (1970/2020) concept of "reading the world" in one her annotation comments, highlighting, "this image of Africa doesn't have all the countries represented. ... There's so often ... the mislabeling of Africa as a country like that ... I just wonder ...[if] maps like this could implicitly reinforce the idea that Africa doesn't have as many countries as it actually does."

Jessie was able to read a tool critically that was used in this literacy lesson, but like Sabrina, did not offer alternatives or ideas for how this educator could encourage students to engage in this criticality. While the digital annotation task invited the participants to make connections to student identities, they were still developing their skills in imagining and explaining possible alternatives to literacy instruction that took a CSP approach. While they could sometimes identify opportunities for developing students' critical consciousness, as in the two examples presented, participants were tentative in their language and unsure of what the CSP-informed version of the lesson might look like. This uncertainty stood in contrast to participants' ability to identify moments where instruction was accessible or could be made more accessible, wherein participants provided significantly more annotations.

#### Discussion

One of the primary goals for this literacy methods course was to set novice teachers up with replicable CSP and UDL informed practices and processes that would transfer from the teacher preparation classroom into the elementary classroom. The different assignments in this course fostered practice of teacher noticing, a thought process that novice teachers can practice and apply both to their own teaching and the teaching of others.

The main forum for developing this skill was through the digital lesson annotation assignment, which allowed teachers to develop their teacher noticing in a slowed-down way through pausing, rewinding, and rewatching, options that were not available to them in live classroom observations. Laurie was able to curate the lessons that students engaged with, ensuring that there were opportunities for discussing the strengths of teaching choices, considering the implications of language and actions, and exploring moments of opportunity (when criticality or accessibility were possible).

This assignment used the lesson video as a close reading text, and the data indicate that students (with Laurie's scaffolding) treated it as such, rereading it and taking up different lenses. Criticality was the most challenging aspect of the assignments for students and an area that can be revised and augmented in future iterations of the course. Each student brought the lenses of their own experiences and identities to the text and, therefore, noticed different things in the lesson. It would be helpful, then, for partners to watch one another's digital annotations of the same lesson and then discuss one another's perspective and ideas for revision of the lesson. This process would offer additional opportunities to develop a critical stance, in addition to reinforcing the value of collaboration and social presence. This assignment offers an asynchronous learning opportunity that functions as a slowed-down guided observation or a scaffolded lesson study process (Fernandez, 2002; Lewis et al., 2004).

While the digital lesson annotation assignment provided a clear and intentional example of fostering teacher noticing for examples of access and criticality, other aspects of the course developed these transferable skills, as well. The opportunity to engage in activities and learning structures that they would then engage in with their own students (such as book club meetings) allowed novice teachers to notice both affordances and challenges of practices associated with CSP and UDL. They were able to describe how literacy activities practiced in the course influenced their classrooms. Our data indicate that their participation in these literacy activities shaped how they planned to implement them with their own students.

In addition, to borrow Jessie's term, a "secondary layer of learning" took place in this course. Our participants described consistently attending to the way that material was presented and, in particular, the elements of UDL incorporated in the course design, seeking models and practices that they could transfer into their own classrooms. Conversely, while the course had an embedded secondary layer of learning about CSP, participants did not notice and name these aspects of the course design as explicitly as they

identified the UDL connections. Findings suggest that an intentional instructional design that drew on the principles of UDL laid the foundation that allowed both students and instructors to capitalize upon the affordances of asynchronous and small group synchronous learning experiences.

These assignments captured students' in-process thinking and both descriptive and interpretive teacher noticings, so they could be analyzed and used to develop responsive teaching practices. However, the noticing and naming of CSP may need to be more explicitly identified for students, rather than left to a secondary layer of learning.

#### **Implications**

Our analysis indicated that the P+E Framework (Dunlap et al., 2016) clarified both opportunities and challenges for students developing practices associated with CSP and UDL in online courses. Our findings build upon the existing literature, which emphasizes the need for intentionality in instructional design for high-touch courses in high-tech learning environments to highlight the additional challenges arising when these courses also include vital consideration of (dis)ability, race, and other aspects of identity. An approach that prioritizes both teaching presence and social presence can allow for rich cognitive presence in tasks such as critically reflecting on teaching practices and materials.

The P+E Framework (Dunlap et al., 2016) and the CoI model before that (Garrison et al., 2000) outlined the importance of teacher presence. In teacher education courses, teacher presence serves two purposes. As previous research has described, it organizes the course and the interactions between students and the instructor, the content, and other students. However, it also works to provide novice teachers with a vision of what teaching can or should look like. Consequently, to foster CSP- and UDL-informed practice in novice literacy teachers, teacher educators need to continuously model CSP and UDL informed teaching in our own practice. We, thus, need to be well-versed in CSP and UDL ourselves.

Another important implication is that teacher educators need to be well-versed in different technological platforms utilized to deliver instruction, so model teaching practices infused with UDL and CSP can be implemented. Laurie was able to work with an instructional designer at her institution to build other online courses and was able to transfer the skill set she developed during those experiences to the development of this course. This support allowed Laurie to focus on being intentional about the use of technology to support CSP and UDL integration, rather than focusing on learning how to use and implement the technology. Many teacher educators could likely benefit from that type of support for instructional design, but unfortunately, that type of job-embedded professional development differs from the type of packaged one-shot professional development for new technology that frequently occurs.

Developing practices associated with CSP and UDL in online literacy courses also requires an approach to online courses that is flexible and evolving in response to students each semester. This flexibility tends to go

against prevailing wisdom that once a course is built and certified, it can and should be left alone for years. The values of our teaching – that it is culturally sustaining, inclusive, engaging, and responsive – cannot fall to the wayside when we move a high touch course online. If CSP and UDL informed instruction involves bending curriculum toward your learners (Minor, 2018), this flexibility and student-centered approach needs to be modeled in high-touch online literacy methods courses. Educators must adapt and think about how our values and beliefs about our own teaching can be maintained in an online environment.

#### References

Ahmed, S. K. (2018). Being the change: Lessons and strategies to teach social comprehension. Heinemann.

Allen, D. (2003). Dancing in the wings. Puffin Books.

Aronson, B., & Laughter, J. (2016). The theory and practice of culturally relevant education. *Review of Educational Research*, 86(1), 163-206. https://doi.org/10.3102/0034654315582066

Barnhart, T., & van Es, E. (2015). Studying teacher noticing: Examining the relationship among pre-service science teachers' ability to attend, analyze and respond to student thinking. *Teaching and Teacher Education*, 45, 83-94. <a href="https://doi.org/10.1016/j.tate.2014.09.005">https://doi.org/10.1016/j.tate.2014.09.005</a>

Bingham, A.J., & Witkowsky, P. (2022). Deductive and inductive approaches to qualitative data analysis. In C. Vanover, P. Mihas, J. Saldana (Eds.), *Analyzing and interpreting qualitative research: After the interview* (pp. 133-140). Sage.

Blomberg, G., Renkl, A., Sherin, M. G., Borko, H., & Seidel, T. (2013). Five research-based heuristics for using video in pre-service teacher education. *Journal for Educational Research Online*, *5*(1), 90-114. <a href="https://www.researchgate.net/publication/256639966">https://www.researchgate.net/publication/256639966</a> Five researchbased heuristics for using video in pre-service teacher education

Brown, B. Schroeder, M., & Eaton, S. E. (2016). Designing synchronous online interactions and discussions. In M. A. Takeuchi, A. P. Preciado Babb, & J. Lock (Eds.). Proceedings of the IDEAS: Designing for Innovation, pp. 51-60. University of Calgary. <a href="https://files.eric.ed.gov/fulltext/ED573166.pdf">https://files.eric.ed.gov/fulltext/ED573166.pdf</a>

Center for Applied Special Technology. (2018). *Universal design for learning guidelines version* 2.2 [graphic organizer]. <a href="https://udlguidelines.cast.org/">https://udlguidelines.cast.org/</a>

Cherry-Paul, S., & Johansen, D. (2019). Breathing new life into book clubs. Heinemann.

DiAngelo, R. J. (2020). White fragility: Why it's so hard for white people to talk about racism. Beacon Press.

Dunlap, J. C., Verma, G., & Johnson, H. L. (2016). Presence + experience: A framework for the purposeful design of presence in online courses. *TechTrends*, 60, 145-151.

Fernandez, C. (2002). Learning from Japanese approaches to professional development: The case of lesson study. *Journal of Teacher Education*, *53*(5), 393-405.

Freire, P. (1970/2020). *Pedagogy of the oppressed*. (30th anniversary ed.). Bloomsbury.

Garcia, A. C., & Baker Jacobs, J. (1999). The eyes of the beholder: Understanding the turn-taking system in quasi-synchronous computer-mediated communication. *Research on Language and Social Interaction*, 32(4) 337-367. https://doi.org/10.1207/S15327973rls3204\_2

Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, *2*(2–3), 87–105.

Garrison, D. R., & Arbaugh, J. B. (2007). Researching the community of inquiry framework: review, issues, and future directions. *The Internet and Higher Education*, 10(3), 157–172.

Hall, T. E., Meyer, A., & Rose, D. H. (2012). An introduction to universal design for learning: Questions and answers. In T. E. Hall, A. Meyer, & D. H. Rose (Eds.), *Universal design for learning in the classroom: Practical applications* (pp. 1–8). Guilford Publications.

Johnson, H., Dunlop, J., Verma, G., McClintock, E., DeBay, D., & Bourdeaux, B. (2019). Video-based teaching playgrounds: Designing online learning opportunities to foster professional noticing of teaching practices. TechTrends, 63(2), 160-169.

Kolb, D. A. (1984). Experiential learning: experience as the source of learning and development. Prentice-Hall.

Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, 32(3), 465–491. doi:10.3102/00028312032003465

Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: A.k.a. the remix. *Harvard Educational Review*, 84(1), 74–84. doi:10.17763/haer.84.1.p2rj131485484751

Ladson-Billings, G. (2021). I'm here for a hard re-set: Post pandemic pedagogy to preserve our culture. *Equity & Excellence in Education*, *54*(1), 68-78. <a href="https://doi.org/10.1080/10665684.2020.1863883">https://doi.org/10.1080/10665684.2020.1863883</a>

Lee, H. (2002). To kill a mockingbird. Harper Perennial.

Lewis, C., Perry, R., & Hurd, J. (2004). A deeper look at lesson study. *Educational Leadership*, 61(5), 18-22.

Lowenthal, P. R., & Dunlap, J. C. (2020). Social presence and online discussions: A mixed-method investigation. *Distance Education*, *41*(4). <a href="https://doi.org/10.1080/01587919.2020.1821603">https://doi.org/10.1080/01587919.2020.1821603</a>

Marks, J. (2020). From the desk of Zoe Washington. Katherine Tegen Books.

Meier, E. (2015). Beyond a digital status quo: Re-conceptualizing online learning opportunities. *Bank Street Occasional Paper Series*, 34. <a href="https://www.bankstreet.edu/occasional-paper-series/">https://www.bankstreet.edu/occasional-paper-series/</a>

MetLife Foundation. (2009). The MetLife survey of the American teacher: Collaborating for student success. <a href="http://files.eric.ed.gov/full\_text/ED509650.pdf">http://files.eric.ed.gov/full\_text/ED509650.pdf</a>

Minor, C. (2018). We got this: Equity, access, and the quest to be who our students need us to be. Heinemann.

Muhammad, G. (2021). Cultivating genius: An equity framework for culturally and historically responsive literacy. Scholastic.

Nelson, L. L. (2013). *Design and deliver: Planning and teaching using universal design for learning.* Brooks Publishing.

Paris, D. (2012). Culturally sustaining pedagogy: A needed change in stance, terminology, and practice. *Educational Researcher*, 41(3), 93–97. doi:10.3102/0013189X12441244

Paris, D., & Alim, H. S. (2014). What are we seeking to sustain through culturally sustaining pedagogy? A loving critique forward. *Harvard Educational Review*, 84(1), 85–100. doi: 10.17763/haer.84.1.982l873k2ht16m77

Perry, K. H. (2012). What is literacy? A critical overview of sociocultural perspectives. *Journal of Language and Literacy Education*, 8(1), 50-71.

Rapp, W. H. (2015). *Universal design for learning in action: 100 ways to teach all learners*. Brooks Publishing.

Reynolds, J. (2020). *Stamped: Racism, antiracism, and you.* Little Brown Books for Young Readers.

Richards, L., & Morse, J.M. (2013). Read me first for a user's guide to qualitative methods (3rd ed.). SAGE Publications.

Ronfeldt, M., Owens Farmer, S., McQueen, K., & Grissom, J. (2015). Teacher collaboration in instructional teams and student achievement. *American Educational Research Journal*, *52*(3), 475-514.

Sherin, M. G., & Han, S. Y. (2004). Teacher learning in the context of a video club. *Teaching and Teacher Education*, 20(2), 163–183.

Singleton, G. E. (2015). Courageous conversations about race: A field guide for achieving equity in Schools. Corwin.

Verma, G., Johnson, H., Dunlap, J., & McClinctock, E. (2015). Fully online methods courses? Reconceptualizing STEM teacher preparation through "spaces of learning". In S. Chandrasekharan, S. Murthy, G. Banerjee, & A. Muralidhar (Eds.). *Proceedings of epiSTEME 6- Emerging Computational Media and Science Education* (pp. 372-380), Cinnamon Teal Publishing.

Watts, L. (2016). Synchronous and Asynchronous communication in distance learning: A review of literature. *The Quarterly Review of Distance Education*, 17(1), 23–32.

Contemporary Issues in Technology and Teacher Education is an online journal. All text, tables, and figures in the print version of this article are exact representations of the original. However, the original article may also include video and audio files, which can be accessed online at <a href="http://www.citejournal.org">http://www.citejournal.org</a>

## Appendix Deductive and Inductive Code Book

Inductive Code	Deductive Code (P+E Framework)	Data Excerpt
using literacy- specific terminology to describe teaching practice	reflective observation; cognitive presence	The teacher asks an efferent question, which according to Fischer, Flood and Lapp, is a question that concerns the details of the text. The teacher asks, I'm wondering about their body and body here and if it has anything to do with where they live? So, this promotes inferential thinking, which is an important part of children's literacy development Beth, digital annotation
interpreting the purpose of teaching moves	reflective observation; cognitive presence	Clearly there's an effective attention-getting signal that the students are acquainted with well and practiced with her on some point that out because clearly that's like a procedural part of this activity that is already internalized and createsthe ability for the lesson to continue with this fairly quick pacing Jessie, digital annotation
interpreting the purpose of teaching materials	reflective observation, cognitive presence	In this particular part of the reading workshop, she reveals the anchor chart and she talks about how we're going to do the read aloud. And she pulls out her chart, which is how to care, choose, react to problems Sabrina, digital annotation
critically reading for race	reflective observation and abstract conceptualization; cognitive presence	[I'm]thinking about what ways this[lesson]is connecting to students' identities. I'm just thinking about how and if we can extrapolate this one character, her being a black character and kind of extrapolating that from being stereotypical, but also just describing that's what that particular character is like Sabrina, digital Annotation
critically reading for accessibility	reflective observation; cognitive presence	That gesturing to the soles of the feet, I think is especially useful, particularly if there are some students who are emergent bilinguals or multilinguals in the class. Soles is a less high frequency word and I think just that quick gesture illuminates the meaning quite well Jessie, digital annotation
going beyond the assigned task	cognitive presence	I watched the next video and just it went on automatically right after this where she debriefs with her facilitators and she talks about using the data to support and seeing if she actually needs the goals and objectives that she wants. And she talks about how she assessed the different pieces of paper with the post-its and talks about how the first on the rug, it's scaffolded, then there's a part where they do it on their own Sabrina, digital annotation

Inductive Code	Deductive Code (P+E Framework)	Data Excerpt	
directly connecting to course readings	cognitive presence; reflective observation	The first thing I noticed was the teacher defined the purpose of the reading, which was, "what Seymour Simon trying to teach us about gorillas" and Fisher, Flood and Lapp, emphasize that this is essential for interactive read aloud Beth, Digital Annotation	
acknowledging/ engaging with the course instructor/teacher in the video	social presence/ teaching presence	For reflection, for your first question, Laurie was, what have you learned by closely analyzing this clip? - Beth, digital annotation	
connecting to own teaching practice	active experimentation	I haven't been using turn and talks as much this year because of the social distancing requirements. But, I do have a small reading group where I feel like we could do more. I could sort of excise myself from the conversation a bit more and just have my students really lead the discussion a little bit more with each other, which sometimes they do. But I think that I could probably like release, relinquish control, and see how they go. And I think especially if I give them some tools to reference, that will probably help Jessie, digital annotation	
checking in with one another	social presence	Jessie: But it's just likeI have been seeing suasion, right? I'm assuming it's like persuasion but  Sabrina: yeah, that's how I read it.  Jessie: Yeah.  - book club meeting 1	
online learning design teaching presence		In terms of asynchronous I think a huge shift[is that]before there was time spent talking about assignments in class. I feel like there's been a shift of there's no talking about it, if you have a question, you can ask, but like there's we're not wasting class time talking about assignments unless it's productive to like supporting you in. It's more of like here's like an exemplar, here's a video describing the assignment and you can watch that and if you have questions. I've appreciated that Sabrina, Interview	
managing one's own learning environment social presence		I think there was a little bit of a learning curvein terms of what it feels like to one be present while the teachers talking, like not being distracted by like a million tabs on my screen or the fact that I had to quickly turn off all notifications from like my texts in you know the banners on your computer from being notified. I felt like I remember actively being at[school] and my phone was in my bag, and that was it	

Inductive Code	Deductive Code (P+E Framework)	Data Excerpt
		and I was just with the class for that two hours. Being home and like hearing sirens, and like my tea kettles on always I've had to navigate a lot of forcing myself tosay that this is sacred time and I just want to be present Sabrina, Interview
managing collaborating with others in an online learning environment	social presence	That's something that I'm not a huge fan of, when we have to meet in smaller groups. It's just that we have, as working teachers, or we havejust other things going on, it's just hard sometimes to schedule a time that works for everyone. There was a specific time in one of my classes. I don't know which one it was, but where like two of us could meet, but the other one and then like one time three of us could meet and one couldn't. So, it was just like it was just difficult in that way Beth, Interview
the role of the Pandemic	teaching presence	Everyone is just like, "I am on my computer, when I'm done with you, I'm going to answer my emails and then I'm going to prep tomorrow and I'm never leaving this chair for the next probably three hours." I'm in the same computer and it just feels like helpful tosay, "In this amount of time, this is the[structure],"that's really helped me I think sort of like pace out what's happeningIt definitely feels like I didn't care about that before, and now I care about it a lot Sabrina, Interview