ESTABLISHING SOCIAL PRESENCE THROUGH ONLINE INTERACTIONS: A CASE STUDY IN A LITERACY CLINIC

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Abstract

During the global pandemic, teachers and students were forced to quickly adjust teaching and learning to fit in the new socially distanced world. Along with the challenge of establishing effective online teaching tools came the need to create social spaces for connecting with students through teacher-student interactions. This study followed the practices of K–12 teachers who were also graduate students seeking an advanced endorsement in literacy as they grappled with problems and solutions of online learning during an intensive K–12 literacy tutoring program. The researchers honed in on the work of one focal teacher as she carved out a new social space for connecting with her students. This work resulted in the identification of specific criteria for three dimensions of social presence: relationship building, engagement, and social interactions.

Keywords: social presence, relationship building, engagement, literacy tutoring, motivation, virtual learning, online learning, remote learning

Introduction

According to UNESCO and UNICEF (2020), COVID-19 affected 99% of the world's population, specifically 1.725 billion students in 193 countries. In spring 2020, the U.S. K–12 education system changed dramatically and, while it was not known at the time, these changes would have a profound and lasting impact on teaching and learning. During that time, K–12 teachers and students were suddenly told they would not be returning to school due to a global pandemic. The major question on the minds of educators was *How do we press on with teaching and learning?* Initially, many districts and teachers took the approach of checking in with students as much as possible and providing asynchronous activities via what was originally termed "eLearning."

However, districts and teachers quickly discovered that asynchronous activities and quick check-ins alone did not offer students a viable solution.

We, as educators, were pushed well outside of our comfort zones and tasked with establishing new protocols for teaching and learning on an expedited basis. We sought out practices that were flexible enough to allow for the affective needs of our students, technological challenges, and accessibility issues. During that initial shift, teachers were inadequately prepared to deliver instruction remotely (Trust & Whalen, 2020).

This led school districts to pioneer a distant way of instructing students, which would include synchronous communication and adoption of the term *emergency remote learning* (Tulaskar & Turunen, 2021) One of the biggest challenges with the remote setting that educators faced was the lack of a built-in social space naturally provided by the traditional classroom. These traditional face-to-face interactions embedded opportunities to build relationships, engage in learning, interact socially, and, ultimately, establish a sense of community.

Context and Background

Remote learning is not a novel idea in higher education, but, prior to the pandemic, it was less common for school-age children to attend school virtually. Many parents of school-age children work and/or have multiple children to manage. In an effort to provide support during the pandemic, many school districts were motivated to design a form of education to respond to this unprecedented situation. Cavanagh (2018) shared that well-prepared school districts would have a plan of action in place and discussed the integration of technology to support students from a distance after Category 5 Hurricane Michael made landfall in the Florida panhandle in 2018. Moreover, Quezada et al. (2020) recommended strategies, such as reducing lesson time, integrating video clips, having guest speakers, and including small group instruction. However, at the time of the pandemic, most school districts across the globe were unfamiliar with this literature, lacked an emergency plan, and were rendered unprepared for this type of massive and sudden shutdown.

In this new and sudden world for school-aged children to participate in remote learning, teachers quickly realized that students would need academic, emotional, and social support. But how could teachers establish the social connections necessary to provide such support and build community? For many teachers, social support was provided within the four walls of a classroom and not in a remote setting. Since online classes lacked the physical space of the face-to-face setting, there was an urgency to create an engaging and interactive online environment.

In this study, we investigated the dimensions and dynamics of social presence within the context of a K–12 literacy clinic. As with many educational settings during the pandemic, our clinic transitioned abruptly to remote learning. Thus, our focus extended beyond academic instruction to include understanding how teachers fostered social engagement in the online environment. We utilized inquiries into the establishment of social presence in virtual teaching and learning, and the negotiation of teacher-student relationships through online interactions, to frame our investigation.

This investigation was essential in helping us understand how our teacher education program might help educators effectively navigate various aspects of the online environment.

We begin by framing this study theoretically and situating it within existing research. Then, we describe our use of case study methods and highlight how our work with our teachers helped us more deeply understand what it takes to establish social presence in the online space. Next, we present results and findings that identify specific criteria that are not only beneficial, but often necessary for successful relationship building, engagement, and social interactions with students in order to motivate them for literacy learning. We conclude with a discussion of the nuances and factors involved and offer conclusions that can be drawn as a result of this work.

Theoretical Framework

In preparing educators for their work with students, we view learning as a collaborative process that involves active and social construction of knowledge (Mercer & Littleton, 2007; Vygotsky, 1978). It is priority that our courses, whether onsite or online, consist of learning communities in which instructors, graduate students, and school-age students work together and learn from each other and form reciprocal relationships. Creating such communities of practice (Wenger, 1998) results in student-centered learning that is at the heart of our reading education program.

The COI Framework

Social connections are an important element in developing teaching and learning experiences that result in positive perceptions of learning stemming from engagement and collaboration. The social presence theory was formulated by Short, Williams, and Christie in the 1970s to elucidate the impact of media on communication. Their focus was primarily on the influence of telecommunications on interpersonal interactions (Lowenthal & Snelson, 2017). According to Lowenthal and Snelson (2017), during the 1980s, the popularity of text-based asynchronous computer-mediated communications (CMC), such as email, was increasing, yet it remained an inherently unsociable and impersonal method of communication. In the online world, models, such as the Community of Inquiry (COI; Garrison et al., 1999) framework, were built upon the belief that CMC can support online learning experiences in which social, cognitive, and teaching presence is established and that such experiences spur intellectual stimulation and curiosity. While this model was developed with higher education in mind, its principles span age ranges and can be considered across all online teaching and learning situations in general. The findings of Lowenthal and Snelson's (2017) study indicated that the COI framework's definition of social presence must be considered in conjunction with teacher and cognitive presence and can serve as a model when used in an online collaborative learning environment.

Social Presence

While somewhat nebulous, the notion of presence in teaching can play an instrumental role in the success of online learning (Boettcher et al., 2016). Researchers have been studying this notion for

over two decades. In their early research, Rourke et al. (2001) defined social presence as "the ability of learners to project their personal characteristics into the community of inquiry, thereby presenting themselves as 'real people'" (p. 52). Later, Sung and Mayer (2012) refined the notion of social presence by specifying five factors that account for the degree to which learners feel personally connected to others in the online learning environment: social respect, social sharing, open mind, social identity, and intimacy. Whiteside (2015) expanded upon the earlier work of Rourke and colleagues (2001) to explicitly explore the role of the instructor in establishing social presence.

Social presence allows teachers to create necessary connections with students (Boettcher & Conrad, 2016). Factors such as social presence can impact academic achievement and influence the social-emotional dimensions that we know are critical to establishing a positive learning environment conducive to student success (MacDonnell et al., 2021). Frequently, students find social-emotional support embedded naturally in the classroom through interactions with their peers and teachers (Aspen Institute, 2019). According to Jones and Khan (2017), academic learning and success are intertwined with the establishment of cognitive, social, and emotional development, and all of these factors promote student engagement and motivation. Regardless of the distance between the student and teacher, there is still a responsibility to meet the individual needs of each child. Therefore, establishing interpersonal relationships within traditional school communities is important (Esposito, 1999).

Although definitions of social presence vary, ours is one that was constructed based on a combination of several factors, including previous literature, teacher observations, our own experiences in working with children of various ages, and our theoretical positioning around social learning. These combined factors led us to view social presence as being the primary construct necessary for positively influencing student learning in the remote world. As such, the definition of social presence that we have constructed based on these combined factors includes three broad channels for its establishment: *relationship building, engagement,* and *social interactions*. We used these three channels to guide us as we studied this construct.

Relationship Building

It is important to evaluate the impact of remote learning on relationships, particularly between teachers and students. However, cultivating positive teacher-student relationships in the remote setting can be challenging. Students' feelings toward online learning are dependent upon the development or lack of development of the student-teacher relationship. For example, some students may feel more comfortable working online to avoid in-class ridicule when they make mistakes (Humphry & Thompson, 2019). Multilingual learners may exhibit shy and unsociable behaviors in classroom settings due to the language context. More specifically, multilingual learners may exhibit shy behavior that may not be demonstrated while interacting with peers who speak their native language (Ash et al., 2014).

In the remote setting, relationship building is one of the cornerstones of effectively establishing social presence. However, since the onset of online learning, this is not easily done. For example, Bair and Bair (2011) reported that students in online courses appreciated opportunities to connect but felt that online courses, which lacked physical contact, left them feeling distant and socially isolated. They found there was a disconnect between strategies that would facilitate social engagement in traditional settings that did not easily translate to the online world.

Online Engagement

In considering how teachers might create new literacy experiences necessary to support their students remotely, we uncovered an emerging body of research on digital strategies, applications, and platforms that could be used to encourage student engagement. For example, Oczkus (2020) discusses how reciprocal teaching encouraged student-teacher interaction in the online environment through synchronous communication. García-Martín and Cantón-Mayo (2019) discuss the recent prominent impact technology has made on many aspects of life, especially in the context of education, to improve upon teaching in the classroom. With the recent pandemic, many classroom environments shifted to a virtual setting, and digital competency was prevalent in the augmentation of the teaching-learning process. García-Martín and Cantón-Mayo (2019) found a high percentage of teachers used Google, YouTube, and wikis to enhance student learning prior to the onset of COVID-19, which helped create a foundation for remote learning but lacked the necessary attributes for student engagement.

Engagement is imperative in the virtual setting, especially during synchronous communication, and using digital tools amplifies student participation through research-based techniques. Interactive digital tools, such as Blooket, Duolingo, Digipuzzle, Pear Deck, Gimkit, Google Suite, Kahoot, Nearpod, ClassDojo, Quizlet, EdPuzzle, Flipgrid, and Kahoot, were used in conjunction with synchronous sessions to promote student engagement (Mohd et al., 2023). The advancement of pandemic-imposed restrictions allowed digital technologies to become an instrumental part of education, resulting in relevant changes in the way teachers collaborate, communicate, learn, and teach (Ilieva & Yankova, 2020). Live video conferencing platforms were an essential component for teachers to use while working with their students virtually. Still, they were not interactive enough to establish the necessary student-teacher connections needed for success in the newly created online classroom.

The Role of Motivation

In framing learning as a process that involves the social construction of knowledge, Guthrie and Cox (2001) reminded us of the relationship between learning and motivation. In the literacy domain, motivation is multidimensional, and classroom practices influence both motivation and engagement (Guthrie & Cox, 2001; Guthrie & Wigfield, 2000; Wigfield & Guthrie, 1997). Classroom practices that foster motivation and engagement are often driven by social interactivity (Guthrie & Cox, 2001). However, such practices can be difficult to replicate in the virtual world. This study is framed by the notion that some level of motivation is necessary to elicit growth in

learning. Based on this idea, studying the practices that are necessary for establishing social presence might also influence and be influenced by motivation in the virtual setting.

Overall, the examination of online teaching and learning experiences for school-age children, and specifically those involving social presence, has been limited (Carrillo & Flores, 2020). Without necessary practical knowledge of how to create social presence in a remote classroom, teachers were forced to instruct students in a way that was unfamiliar and, perhaps, uncomfortable. Now that we are post-pandemic, teaching modalities continue to evolve. With this research, we hope to help teachers consider the importance of creating social spaces for learning in all contexts.

Method

A case study approach provides the researcher with an in-depth analysis to construct potential explanations based on the examination of the intricacies of relationship building within real-life events (Stake, 1995; Yin, 1994). This case study was designed to improve our understanding of the dimensions and dynamics of social presence in the virtual teaching and learning space. The following questions framed our work:

1. How can our teachers establish social presence through virtual teaching and learning?
2. How is a teacher's relationship with their students negotiated through online interactions?

Context

The midwestern university at which the study was conducted requires graduate students in literacy to complete a three-part clinical sequence. The sequence involves a diagnosis and assessment course, a literacy intervention pre-practicum course, and a two-part practicum. The practicum consists of two courses: one course requires graduate students to work with an elementary student, and the other requires graduate students to work with an older student. Both courses are taken simultaneously and immediately after the pre-practicum course. This study was conducted during the two-part practicum courses in the spring and summer of 2020. Each practicum course required candidates to complete 20 hours of one-on-one intensive literacy tutoring. Normally, this instruction would take place in a school-based setting or clinic and would be conducted side-by-side. However, as a result of the pandemic, tutoring was transitioned to a virtual setting, which took place remotely via Zoom video conferencing (see Table 1).

The literacy program in which the study occurred was highly collaborative and required both live and recorded video observations with individual follow-up coaching meetings between instructors and candidates. This collaboration occurred online via video conferencing as a result of the pandemic. Table 1 outlines how instruction normally occurred and how it shifted as a result of the pandemic.

Table 1

Tutoring Program

	Required Hours	Spring (Online Program)	Summer (On-Campus)
Traditional Program Instruction	20 hours	**School-Based (Side-by-Side):** The teacher and student met at a specified location and the teacher and student worked in-person with hands-on materials. Computers were occasionally used. **How students were placed:** Teachers chose the students they were tutoring.	**Clinic-Based (Side-by-Side):** The teacher and student met in the literacy clinic on campus in-person with hands-on materials. Computers were occasionally used. **How students were placed:** Students were placed with teachers by the practicum director.
Changes Due to Pandemic	20 hours	**Virtual:** The teacher prepared lessons that were digital and delivered remotely.	**Virtual:** The teacher prepared lessons that were digital and delivered remotely.
Traditional Program Coaching	Four 30-minute observations	**Observation 1**: Video-recorded lesson. Instructor provided written feedback. **Observation 2**: Video-recorded lesson. Instructor met with the teacher via Zoom to provide feedback. Written feedback was also provided. **Observation 3**: Instructor observed the lesson in real-time via video conferencing. Instructor provided feedback immediately after the lesson. Written feedback was also provided. **Observation 4**: Video-recorded lesson. Instructor provided written feedback via rubric.	**Side-by-Side:** The instructor observed each of the four 30-minute lessons in person. Instructor provided feedback immediately after the lesson. Written feedback was also provided.
Changes Due to Pandemic	Four 30-minute observations	No changes were needed.	Instructor observed each of the four 30-minute lessons in real-time via video conferencing. Instructor provided feedback immediately after the lesson. Written feedback was also provided.

Researchers' Roles

One practicum director oversees the program, and additional instructors generally work with up to eight candidates (hereafter referred to as "teachers") each per practicum course. At the time of this study, the researchers are instructors, and Mary is also the practicum director. Mary is a full-time university faculty who has directed and taught in the program for more than ten years. Michelle is an adjunct instructor and part-time teacher of multilingual learners. Michelle has been involved with practicum instruction since the inception of the online program in 2018.

Participants

This study was designed for implementation with graduate students enrolled in a Master of Education degree program seeking a reading teacher or reading specialist endorsement from the state board of education. Our graduate students were in-service teachers who had previously earned an elementary or secondary professional educator's license from the state. Graduate students were provided with an informed consent form and had the opportunity to opt out of the study with no penalty to their coursework. There was a total of 22 participants. Of the participants included, 21 identified as female, and one identified as male. All participants had taught for at least one year and were in various stages of their career. The initial data were collected from participants as part of their normal coursework.

Research Ethics

In terms of compliance with ethical rules, this study was initiated after applying to the university's Institutional Review Board and obtaining the necessary approval. The participants signed an informed consent form. In line with the principle of confidentiality, all teachers and students were given pseudonyms.

Data Collection and Analysis

To better understand the complexities of how social presence is constructed in the virtual space, our approach was multilayered. Initially, over 16 weeks, we collected written final reflections, video-recorded lessons, and daily reflection logs from all participants from March 2020 to July 2020. These three activities were a part of the normal coursework required for the practicum courses. In this section, we describe the data collection and analysis methods used for each phase of the study.

Phase 1: Initial Coding of Final Reflections

In our initial analysis, our goal was to begin with broad overarching perceptions and then drill down to glean specific information. Therefore, in the first stage, we analyzed the teacher's final written reflections because these provided broad reflections on the entire practicum experience and they clearly elicited what the teachers viewed as problems and solutions. The final reflections were

their written responses to open-ended prompts, such as *In your implementation of virtual teaching lessons, what was easy and what was challenging? What were the hindrances of virtual teaching compared to in-person?* Our first step was to sort their written responses into perceived problems and their solutions.

Problems

We used in vivo coding (Saldaña, 2016) to tease out what was perceived as problems associated with virtual tutoring. From these responses, three dominating themes emerged related to problems: struggles with engagement through hands-on activities, struggles in engaging students generally, and technology issues related to interactions. These themes lead us to the next phase of data analysis, which is described below.

Solutions

Since our goal was to focus our attention on the role of social presence in virtual tutoring and to align with our theoretical framework, we used a priori coding (Johnson & Christensen, 2004) to analyze the solutions. Our three predetermined themes were relationship building, social interaction, and engagement. Coding solutions in this way allowed us to uncover specific elements of each theme and the enactment of each element in order to resolve the problems participants were experiencing.

Phase 2: Transcription of Recorded Lessons

After the initial coding, we wanted to further investigate the solutions teachers found in relation to our three themes. We sought exemplars so that we could unpack teacher practices to determine how social presence was established. To do this, we chose four teachers whose final reflections stood out as potentially containing the discursive substance of analytic narratives about this phenomenon (Dyson & Genishi, 2005). We then watched these participants' video lessons and transcribed instances of social presence demonstrated by the teacher through any of the three a priori themes (relationship building, social interactions, and engagement). To guide this analysis, we watched the videos with specific prompts in mind, such as *How does the teacher use questioning to negotiate social presence? Were there notable actions related to social presence? How did the teacher promote discussion? Did the teacher share and invite personal connections?* Inductive analysis was applied to find relevant information. This involved open-coding for social meaning or importance. This allowed us to generate analytic codes for each of the three themes.

Phase 3: Coding of Focal Teacher's Recorded Lessons and Triangulation

According to Dyson and Genishi (2005), in case study research, angling one's vision refers to the need for researchers to adjust their focus, interpretation, or analysis to gain insights into the phenomenon being studied. This approach allows researchers to select and interpret data in a way that aligns with their research goals. This concept involves being attentive to the nuances of the

case being studied and framing the analysis in a way that sheds light on the research questions (Dyson & Genishi, 2005). In the third stage of data analysis, we angled our vision to help answer our second research question. In order to uncover specific criteria and nuances involved in each dimension of social presence, we negotiated the decision to closely examine the work of one teacher within our case. In reviewing our data analysis from Phases 1 and 2, we chose a focal teacher within this case study whose data from the first two phases stood out as potentially containing more concrete instances and examples of social presence.

Focal Teacher

In selecting a focal teacher for our case, our goal was to use the data we analyzed during the first two phases of the study to identify an individual who provided us with exemplars of social presence. We chose Kayla (all participant names are pseudonyms) as our focal teacher, based on our initial data analysis. Additionally, Kayla chose to work with students (identified as Student 1 and Student 2 below) who were described by their parents as less self-motivated and, in general, did not like to read, which would help us consider the role of motivation in relation to social presence.

At the time of the study, Kayla was a graduate student seeking a master's degree and reading teacher endorsement. She was an in-service teacher who was in her eighteenth year as an educator. Kayla self-selected her students, and she worked with them separately for a total of 20 hours of tutoring each. Kayla did not have prior experience with remote teaching and learning.

Our observations of Kayla's teaching allowed us to study the phenomenon of social presence as it was enacted in the virtual setting. The data gathered helped us ascertain how particular criteria that were socially enacted virtually might help construct or interrupt social presence online.

Kayla's Students. Student 1 was a first-grade multilingual learner with Lithuanian being the primary language spoken in the home. Their parent described them as being a reluctant reader who would often shut down if they encountered words they did not know. The parent stated that Student 1 usually refused to read at home. Their classroom teacher noted that Student 1 rarely participated in class discussions and infrequently volunteered responses during whole group instruction. Student 1 tended to worry about what peers thought and said about them.

Student 2 was a seventh-grade multilingual learner with Japanese being the family's first language. At the time of the study, it was Student 2's third year in the United States. Student 2's family and teacher described them as lacking confidence in their ability to speak English and, as a result, they tended to be shy. Student 2's parent noted that, although they had been reading since age six, they did not like to read, and preferred extra-curricular activities such as playing piano and tennis.

For Phase 3 of our analysis, each researcher independently revisited all Kayla's videos to look closely for patterns and, thereby, develop a more focused category system for coding. This, ultimately, helped us identify specific characteristics and properties of social presence. We used

transcriptions of Kayla's lesson observations to demonstrate explicitly how the social interactions that occurred resulted in social presence.

In addition, we analyzed Kayla's daily reflection logs, which specifically documented day-to-day outcomes and reflective thinking, to triangulate and look at different angles in relation to our three themes. These results and findings are shared below.

Results

Phase 1: Problems and Solutions

Based on the results of our first phase of data analysis, we found that there were similarities in perceived problems associated with virtual tutoring that impacted engagement and interactions. We also found that in most cases our teachers were able to seek out solutions that positively impacted relationship building, social interactions, and engagement. While this was not surprising, the data collected were not specific enough to allow us to understand how such solutions were negotiated in the virtual tutoring sessions and what interactions were involved.

Phase 2: The Role of Motivation

As we dug deeper in the second phase of data analysis, open-coding of video observations helped us better understand the social participation that was involved in virtual teaching and learning. As we watched videos, we were quickly able to see many examples of effective literacy instruction, based on standards we would use in a traditional program. We were also provided with many instances of motivated and engaged students. However, this did not help us determine whether or not social presence, by our definition, was established and if it furthered the student's motivation, engagement, and learning. In other words, we watched many examples of students who were already self-motivated and participated based on their already-established desire to do well. So, the question became *What happens when a student is not self-motivated?* We used Phase 3 of our data analysis to answer this question.

Phase 3: Social Presence Indicators

In our third phase of data analysis, the results from the first two phases of data analysis, plus Kayla's videos, allowed us to uncover specific criteria related to social presence. This data analysis resulted in the creation of an initial list of what we observed to be necessary criteria in the development of social presence when students are not necessarily self-motivated. As we generated the list, we combined what we observed with what we already knew from past research and previous literature on social presence. The result was a rubric of social presence indicators (see Figure 1).

Figure 1

Social Presence Rubric

Social Presence Indicators	Present	Not Present
RELATIONSHIP BUILDING The Teacher:		
Initiated discussions not related to literacy/content		
Used social sharing and self-disclosure to share appropriate personal information		
Included friendly greetings and closures		
Established a team approach by using collective pronouns such as *we*, *us*, *our*		
ENGAGEMENT The Teacher:		
Shared the screen for interactive learning		
Created interactive literacy experiences that allowed the student to type, move, manipulate, and/or control the screen		
Incorporated activities that reflected the student's choice and/or interests		
Agreed with, quoted, or referenced the student's ideas to establish value/validation		
Posed questions that solicited the student's thoughts, ideas, preferences, and/or opinions.		
SOCIAL INTERACTIONS The Teacher:		
Provided compliments, approval, praise, and encouragement		
Provided *frequent* feedback on work that was respectful, positive, and supportive		
Provided feedback using a conversational tone		
Promoted social sharing and self-disclosure by encouraging the learner to bring their feelings, experiences, and situations into the virtual classroom		
Used paralanguage (language outside of formal syntax) and prosody to convey emotion		
Used humor		

The social presence indicators we crafted pinpointed specific criteria that demonstrated how each of our three themes were enacted in the virtual tutoring setting. In the first theme of relationship building, the practices we observed revealed a commitment to nurturing the teacher-student

relationship. For example, the teacher proactively initiated discussions beyond the confines of literacy, indicating an intentional effort to foster a genuine interpersonal connection. Additionally, we noted social sharing and self-disclosure, thereby imparting pertinent personal information within appropriate boundaries. Such disclosures likely contributed to a sense of mutual understanding and trust. And we noted the utilization of inclusive language exemplified by the frequent use of collective pronouns like *we*, *us*, and *our*. This linguistic strategy effectively conveyed a sense of unity and collaboration, cultivating a team-oriented ethos.

For the second theme of engagement, the practices we observed revealed a dedication to fostering meaningful engagement and participation, for example, utilizing screen-sharing to promote active participation and interaction, while also facilitating dynamic exchanges of ideas and information. We also noted literacy activities that were characterized by interactivity and flexibility, which allowed the student to actively participate through typing, movement, manipulation, and screen control. By integrating elements of student choice and aligning activities with individual interests, the teacher effectively personalized the learning experience, thereby enhancing student engagement. Moreover, observed practices demonstrated a commitment to affirming student contributions, evidenced by agreements, quotations, or references to the student's ideas. This practice not only validated student input but also nurtured a sense of agency. We also noted questioning techniques designed to elicit and value students' thoughts, ideas, preferences, and opinions. Such inquiries served to stimulate critical thinking, encourage reflection, and promote active engagement.

In the third theme of social interactions, practices we observed revealed the cultivation of a nurturing and socially rich space, which was characterized by strategies that were instrumental in fostering meaningful social interactions and promoting holistic student development, for example, bolstering confidence and self-esteem by consistently providing positive reinforcement through compliments, approval, praise, and encouragement. Moreover, we observed the teacher's commitment to providing regular and constructive feedback on student work, characterized by a tone that was respectful, positive, and supportive. This not only served to reinforce accomplishments but also offered guidance for improvement in a manner that upheld students' dignity and motivation. Furthermore, the teacher used a conversational tone in delivering feedback, effectively enhancing the accessibility and approachability of communication within the virtual setting. Additionally, the teacher actively encouraged social sharing and self-disclosure by inviting students to disclose their feelings, experiences, and personal situations. This practice promoted a sense of authenticity and connectedness between teacher and student. Furthermore, the teacher skillfully employed paralanguage and prosody, leveraging nonverbal elements of communication to convey emotion and enhance engagement. This use of subtle cues served to enrich the communicative exchange and deepen interpersonal connections.

Lastly, we noted the incorporation of humor, which served to lighten the atmosphere and foster a sense of camaraderie. This utilization of levity effectively mitigated tension and contributed to a positive and enjoyable learning experience.

To test our rubric and criteria, we went back to the videos used for our Phase 2 analysis and applied the rubric as we rewatched all of the videos. We found that in all cases, the teachers demonstrated many instances of these criteria, but did not demonstrate all of the indicators. Conversely, in analyzing Kayla's videos, we found that all videos demonstrated numerous instances of all indicators.

Table 2 identifies some key interactions initiated by Kayla in her work with Student 1. Based on our three themes, relationship building, engagement, and social interaction, we found specific examples that demonstrated Kayla's ability to utilize social presence to communicate with Student 1. Knowing the importance of building a relationship with her student, Kayla shared her enthusiasm with Student 1 on her partner read-aloud book choice, *Frog and Toad Are Friends*, by adding an appropriate personal connection to her enjoyment of the book as well as solidifying a position as a positive role model. Kayla continued to encourage social presence through engagement by eliciting Student 1's thoughts, ideas, perceptions, and opinions by asking them to give insight as to how their daily schedule should be set up. Finally, Kayla stimulated social interaction by providing feedback to Student 1 in a conversational tone, adding a personal touch, "You know what else I'm enjoying about this? You've not only added smoothness to your reading, but you've also added some expression, which is really nice." These three specific examples distinguished Kayla from her counterparts.

Table 2
Social Presence Indicators—Kayla/Student 1

Relationship Building		Analysis
Used social sharing and self-disclosure to share appropriate personal information	"I have to tell you. I picked *Frog and Toad Are Friends* for a reason. *Frog and Toad Are Friends* is a story that I used to read when I was in first grade. So *Frog and Toad* has been around for a really, really long time, and it's always been one of my favorites! So, when I was thinking about what I wanted to pick for us to read together, I was thinking, I'm sorry but I just *have* to pick Frog and Toad because it's the best! It's just one of my favorites!"	Kayla's inclusion of personal information might serve in helping Student 1 connect to their life.

Engagement		Analysis
Posed questions that solicited the student's thoughts, ideas, preferences, and/or opinions	"We'll start out with our schedule here. I just wanted to see what you thought of the schedule. I wanted to know if you wanted to change anything with how we're going to do our layout today." "You like it the way it is? You don't want to change anything? You seem to like to have that same set schedule, which is totally fine. Sometimes it's nice to have some consistency."	Kayla demonstrated a sincere interest in accommodating Student 1's preference about the order in which they would like to complete their literacy activities.
Social Interactions		**Analysis**
Provided feedback using a conversational tone	"You know what else I'm enjoying about this? You've not only added smoothness to your reading, but you've also added some expression, which is really nice. It makes it sound interesting. Really, really nicely done. Excellent read!"	Kayla provided specific feedback that was informal yet pointed.

Similarly, Table 3 provides some key examples of interactions initiated by Kayla in her work with Student 2. In demonstrating relationship building, Kayla positioned herself to be able to assess Student 2's mood from the minute they joined their Zoom session. Kayla began her session building a relationship of trust by asking Student 2 how their day was going or if they had been outside to take a break. This demonstrated a genuine interest in discovering how remote learning was going. Just like with Student 1, Kayla involved Student 2 in the development of their tutoring schedule to encourage student engagement. Finally, Kayla established social presence through social interactions with Student 2. The most profound example of this was when Kayla initiated a conversation about how Student 2 felt about going to Japan (discussed in more detail below). The conversation allowed Student 2 to share their trepidations openly. Again, these exemplars indicated how impactful social presence was to student learning. These specific examples helped us solidify our understanding of the necessitating criteria that resulted in the establishment of social presence.

Table 3

Social Presence Indicators—Kayla/Student 2

Relationship Building		Analysis
Initiated discussions not related to literacy/content	"How was today? Was school work overwhelming or was it okay?" "Did you get outside yet today?"	Kayla demonstrated a genuine interest in how Student 2 was handling their workload (outside of the tutoring sessions).
Engagement		**Analysis**
Activities incorporated student choice and/or interests	"Okay so what do you want to work on today for your fluency? Yesterday you said as a reader you wanted to work on all four of these pieces [shares computer screen, which displays accuracy, expression, phrasing, and rate]. What piece do you want to work on when we are working on fluency today?"	Student 2 was offered a choice of what aspect of fluency they would like to work on.
Social Interactions		**Analysis**
Promoted social sharing and self-disclosure by encouraging the learner to bring their feelings, experiences, and situations into the virtual classroom	"How are you feeling about going to Japan? I know you are nervous."	Kayla initiated this conversation in response to Student 2's noticeable uneasiness about leaving school for a family trip. The conversation Kayla initiated led to a nine-minute discussion in which Student 2 shared trepidations about the trip.

Discussion

Establishing social presence through virtual teaching and learning is certainly complex. The literature we reviewed emphasizes the significance of social connections in online learning environments (Lowenthal & Snelson, 2017). The COI framework proposes that online learning experiences can be enriched through the establishment of social, cognitive, and teaching presence (Garrison et al., 1999). This framework emphasizes the creation of learning communities where interaction and collaboration are central. Both the literature and research findings emphasize the importance of student-centered learning in online environments (Mercer & Littleton, 2007). This involves creating learning communities where instructors, students, and graduate students collaborate and learn from each other.

The research findings from Phase 1 of this study identify relationship building as a key component of social presence in virtual tutoring sessions. The practices observed, such as proactively initiating discussions, social sharing, and providing positive reinforcement, contribute to establishing a supportive learning environment.

To answer our first research question, we had to delve deeply into many layers of research data. In any setting, the teacher-student relationship is heavily nuanced and highly dependent on many factors. And, additional factors arise in the online world. For example, *Is the student entering the virtual setting already motivated for success? What is the level of teacher experience, capability, and expertise in teaching with digital tools?* In addition, there were language factors and social-emotional factors of the learner to consider. While all of these factors were not the main focus of this study, our data highlighted their existence and front-and-center role in the online learning environment. In any case, it is evident that synchronous teacher-student interactions are vital for success in the online world.

Previous literature discusses the role of engagement and motivation in learning, emphasizing that classroom practices driven by social interactivity can foster motivation and engagement (Guthrie & Cox, 2001; Guthrie & Wigfield, 2000). Phase 2 findings indicate that effective literacy instruction and engagement are observed in virtual teaching and learning settings. The research findings on online engagement suggest various digital tools and strategies to promote student participation and interaction in virtual classrooms (Boettcher et al., 2016; García-Martín & Cantón-Mayo, 2019). This aligns with the importance of engagement highlighted in the literature and Phase 2 findings. However, it also raises questions about the role of social presence in furthering motivation and engagement, particularly for students who may not be self-motivated.

The research findings from Phase 3 of this study highlight the importance of social presence indicators in virtual tutoring sessions, which include relationship building, engagement, and social interactions. These indicators align with the COI framework's emphasis on social presence in online learning environments. Kayla's teaching allowed us to study what should occur when a student enters the online world without the motivation necessary for immediate and automatic success. From our data, we were able to extrapolate teacher-led nuances and consider their

meaning. This helped us answer our second research question. We learned that it is precisely the interactions initiated by the teacher that can forge a relationship. The observational videos afforded us the opportunity to get close to these nuances. For example, Table 2 provides examples of moves Kayla made to establish social presence, by our definition, with Student 1. Likewise, Table 3 provides examples of how Kayla connected on a personal level with Student 2. While these are just a few of the social moves that occurred in Kayla's teaching, similar examples were peppered throughout every observational video. This type of social talk, which extended beyond just content, proved to be the driving force in the notion of social presence. It resulted in the creation of a social space that otherwise would not exist.

On many occasions, we made note of Kayla's techniques for making emotional connections with her students. For example, during one session that occurred during the fourth week of our program, Student 2 was comfortable enough with the relationship that was established between Kayla and themselves to initiate a social exchange in the middle of a fluency lesson. They started by asking Kayla if she knew they were leaving for Japan in May. In the video, Student 2 was visibly upset, since they would be leaving before the end of the school year, and it was evident that this was weighing heavily on them. During this exchange, Student 2 informed Kayla that they did not want to go and was very concerned because the significant time change would not allow them to get their homework done because they needed to sleep. Kayla responded by assuring them in the following way:

> Well, [Student 2], here's what you need to remember. You need to tell your teachers that you're going. Okay? And that will be okay. Because as long as they know you are going, they will adjust when your due dates are for your assignments. Okay? So that you will do your homework when it is awake time for you in Japan. Your teachers will understand. You need to just do what you can.

The entire exchange lasted nine minutes. At that time, Kayla decided that, due to Student 2's emotional state, it was best to discontinue the lesson and reconvene at another time. This exchange embeds many of the criteria that are included in our rubric. But, just as important was Kayla's ability to pick up on the social and emotional cues that Student 2 was displaying. Because Kayla had already negotiated a relationship with Student 2 through their social interactions, they were comfortable enough to share their feelings and emotions. This is the epitome of social presence in the virtual world.

In summary, the findings in this study highlight the importance of social presence and motivation in virtual tutoring settings and provide specific examples of practices that contribute to its establishment, engagement, and positive student outcomes. The findings emphasize the need for creating supportive learning communities and fostering positive relationships in addition to using effective instructional strategies to enhance student learning outcomes in virtual environments.

Conclusion

Social presence is a necessary component for effective virtual teaching and learning and is particularly important when students are not intrinsically motivated. However, not all educators know how to establish social presence in the virtual setting. In any classroom, whether it be traditional or virtual, motivation can be driven by social interactivity (Guthrie & Cox, 2001) and can be a key factor in growth in learning. The results of this study led to the identification of specific criteria related to relationship building, engagement, and social interactions that can result in the establishment of social presence in the virtual setting. While the list of indicators may not be comprehensive, it certainly can be used to foster the types of connections that students described as lacking in online education, based on previous research (e.g., Bair & Bair, 2001).

In negotiating a relationship in the virtual world, this study has taught us that many moving parts require the teacher's attention. In addition to motivation, appropriate and effective digital tools are essential for engagement. Students also bring social-emotional needs to the online classroom. And our multilingual learners, in particular, benefit from relationship building to help them build confidence in their language skills (Ash et al., 2014). In sum, talk that goes beyond academics is an essential component of the teacher-student relationship. It is this type of talk that allows teachers to carve out social spaces in the nontraditional classroom setting in which students feel comfortable sharing essential information that can impact their learning and help them feel connected. Future research may focus on studying the impact of social presence on student achievement.

References

Ash, A. C., Rice, M. L., & Redmond, S. M. (2014). Effect of language context on ratings of shy and unsociable behaviors in English language learner children. *Language, Speech, and Hearing Services in Schools*, *45*(1), 52–66.

Aspen Institute National Commission on Social, Emotional, and Academic Development. (2019). *From a nation at risk to a nation at hope: Recommendations from the national commission on social, emotional, & academic development.* A nation at hope. http://nationathope.org/

Bair, B. E., & Bair, M. A. (2011). Paradoxes of online teaching. *International Journal for the Scholarship of Teaching and Learning, 5*(2), 1–15. https://doi.org/10.20429/ijsotl.2011.050210

Boettcher, J. V., & Conrad, R. M. (2016). *The online teaching survival guide: Simple and practical pedagogical tips* (2nd ed.). Jossey-Bass.

Carrillo, C. & Flores, M. (2020). COVID-19 and teacher education: A literature review of online teaching and learning practices. *European Journal of Teacher Education*, *43*(4), 466–487, https://www.tandfonline.com/doi/full/10.1080/02619768.2020.1821184

Cavanagh, S. (2018, October 12). *Lessons for Getting Schools Back Online After Hurricane Michael's Destruction.* https://www.edweek.org/policy-politics/lessons-for-getting-schools-back-online-after-hurricane-michaels-destruction/2018/10

Dyson, A. H., & Genishi, C. (2005). *On the case: Approaches to language and literacy research.* Teachers College Press.

Esposito, C. (1999). Learning in urban blight: School climate and its effect on the school performance of urban, minority, low-income children. *School Psychology Review, 28*(3), 365–377. doi:10.1080/ 02796015.1999.12085971

Frumos, L. (2020). Inclusive education in remote instruction with universal design for learning. *Romanian Journal for Multidimensional Education / Revista Romaneasca Pentru Educatie Multidimensionala*, *12*, 138–142. https://doi-org.nl.idm.oclc.org/10.18662/rrem/12.2Sup1/299

García-Martín, S., & Cantón-Mayo, I. (2019). Teachers 3.0: Patterns of use of five digital tools. *Digital Education Review*, *35*, 202–215.

Garrison, D. R., Anderson, T., & Archer, W. (1999). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education, 2*(2–3), 84–105.

Guthrie, J. T., & Cox, K. E. (2001). Classroom conditions for motivation and engagement in reading. *Educational Psychology Review, 13*, 283–302.

Guthrie, J. T., & Wigfield, A. (2000). Engagement and motivation in reading. In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, & R. Barr (Eds.). *Reading research handbook* (Vol. III, pp. 403–424). Erlbaum.

Humphry, D., & Hampden-Thompson G. (2019). Primary school pupils' emotional experiences of synchronous audio-led online communication during online one-to-one tuition. *Computers & Education.* http://doi.org/10.1016/j.compedu.2019.03.003

Johnson, B., & Christensen, L. (2004). *Educational research: Quantitative, qualitative, and mixed approaches* (2nd ed.). Allyn and Bacon.

Jones, S. M., & Kahn, J. (2017). The evidence base for how we learn: Supporting students' social, emotional, and academic development. Consensus statements of evidence from the Council of Distinguished Scientists [PDF file]. Washington, DC: National Commission on Social, Emotional, and Academic Development & the Aspen Institute. https://assets.aspeninstitute.org/content/uploads/2017/ 09/SEAD-Research-Brief-9.12_updated-web.pdf

Ilieva, G., & Yankova, T. (2020). IoT in distance learning during the COVID-19 pandemic. *TEM Journal*, *9*(4), 1669–1674. https://doi-org.nl.idm.oclc.org/10.18421/tem94-45

Lowenthal, P. R., & Snelson, C. (2017). In search of a better understanding of social presence: An investigation into how researchers define social presence. *Distance Education*, *38*(2), 141–159. https://doi.org/10.1080/01587919.2017.1324727

MacDonnell, M., McClain, K., Ganguli, A., & Elias, M. J. (2021). It's not all or nothing: Exploring the impact of a social-emotional and character development intervention in the middle grades. *Research in Middle Level Education Online*, *44*(2), 1–15. https://doi-org.nl.idm.oclc.org/10.1080/19404476.2020.1868226

Mercer, N., & Littleton, K. (2007). *Dialogue and the development of children's thinking: A sociocultural approach*. Routledge.

Mohd, C. K., Nuraini, C. K., Mohamad, S. N. M., Sulaiman, H., Shahbodin, F., & Rahim, N. (2023). A review of gamification tools to boost students' motivation and engagement. *Journal of Theoretical and Applied Information Technology*, *101*(7), 2771–2782.

Oczkus, L. (2020). The fab four strategies: Digital tools for dramatically improving comprehension. *Literacy Today (2411–7862)*, *38*(2), 48–49.

Quezada, R. L., Talbot, C., & Quezada-Parker, K. B. (2020). From bricks and mortar to remote teaching: A teacher education program's response to COVID-19. *Journal of Education for Teaching*, *46*(4), 472–483. https://doi-org.nl.idm.oclc.org/10.1080/02607476.2020.1801330

Rourke, L., Anderson, T., Garrison, D. R., & Archer, W. (2001). Assessing social presence in asynchronous, text-based computer conferencing. *Journal of Distance Education*, *14*(3), 51–70.

Saldaña, J. (2016). *The coding manual for qualitative researchers* (3rd ed.). Sage.

Stake, R. E. (1995). *The art of case study research*. Sage.

Sung, E., & Mayer, R. E. (2012). Five facets of social presence in online distance education. *Computers in Human Behavior*, *28*(5), 1738–1747. https://doi-org.nl.idm.oclc.org/10.1016/j.chb.2012.04.014

Trust, T., & Whalen, J. (2020). Should teachers be trained in emergency remote teaching? Lessons learned from the COVID-19 pandemic. *Journal of Technology and Teacher Education, 28*(2), 189–199.

Tulaskar, R., & Turunen, M. (2021). What students want? Experiences, challenges, and engagement during Emergency Remote Learning amidst COVID-19 crisis. *Educ Inf Technol 27*, 551–587. https://doi.org/10.1007/s10639-021-10747-1

UNESCO. (2020). 290 million students out of school due to COVID-19: UNESCO Releases first global numbers and mobilizers response. https://en.unesco.org/news/290-million-students-out-school-due-covid-19-unesco-releases-first-global-numbers-and-mobilizes

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes.* Harvard University Press.

Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge University Press.

Whiteside, A. L. (2015). Introducing the Social Presence Model to Explore Online and Blended Learning Experiences. *Online Learning*, *19*(2).

Wigfield, A., & Guthrie, J. T. (1997). Motivation for reading: Individual, home, textual, and classroom perspective. *Educational Psychologist, 32*, 57–135.

Yin, R. K. (1994). *Case study research: Design and methods* (2nd ed.). Sage.