Journal of Online Learning Research (2016) **2**(4), 447-473

Inquiring into Presence as Support for Student Learning in a Blended Learning Classroom

MARK STEVENS
George Mason University, United States
mastevens54@gmail.com

MARY F. RICE
University of Kansas, United States
mary.rice@ku.edu

In blended learning models, students do part of their coursework online and part in small groups with teachers in classrooms. The presence (teaching, cognitive, social) that teachers need to assert in blended environments has been the subject of much scholarly interest. The purpose of this paper is to share findings from a narrative inquiry that explored various aspects of presence in a middle level classroom. Findings are reported using a series of narrative episodes that have undergone narrative inquiry processes of burrowing, broadening, and retelling. What is described is a process wherein diligent dialogue and social presence were used collaboratively between participants in an effort to cross the boundaries between virtual and actual worlds so that problems could be solved, and off-task behavior could be redirected. These findings have implications for the preparation and support of blended teachers and for the evolving theorization of presence in K-12 blended settings.

INTRODUCTION

Blended learning is the purposeful combination of online and face-to-face instructional strategies (Garrison & Kanuka, 2004; Graham, 2013). Further, blended learning structures are supposed to promote learner control over time, place, path, and/or pace of learning (Horn & Staker, 2013). The ratio of internet versus face-to-face instruction as well as the places where the different types of instruction occur varies widely across courses and schools (Horn & Staker, 2011). Of the various types of online learning—including fully-online and supplemental—blended learning is growing the fastest (Barbour, Archambault, & DiPietro, 2013; Picciano, Seaman, Shea, & Swan, 2012).

Blended learning has challenged traditional expectations about the quantity and quality of interactions among teachers and students as well as teacher responsibilities during the learning process (Horn & Staker, 2011). In fact, many have called for teachers to transition from a teacher-centered to a more student-centered learning model (An & Reigeluth, 2011; NEA, 2013; Rowe, Bozalek, & Frantz, 2013).

Although student-centered models of learning afford student choice, they require a high level of classroom management to ensure students learn and maintain adequate time-on-task (Doyle & Carter, 1984; Osher, Bear, Sprague, & Doyle, 2010). Classical classroom management research was developed in traditional settings, and blended learning environments bring new challenges. As researchers, we also need to consider the speed of technological change and the potential disruption to classroom life, such as tool fatigue where students grow tired of using programs and devices (Croxall, 2014). In response, researchers have identified several types of presence (cognitive, social, and teaching) that are intended to support learning and learners' self-regulation in more autonomous blended learning environments (Garrison, Anderson, & Archer, 2010; Shea & Bidjerano, 2010). However, little research exists that examines how teachers establish their presence in K-12 student-centered, blended learning environments. To fill this gap, we conducted a yearlong narrative inquiry (Clandinin & Connelly, 2000; Clandinin, 2013). The questions that guided our work were:

1. How does a teacher make decisions about student support in a blended learning setting?
2. What does it look like when a teacher actively attempts to assert presence in a K-12 blended learning environment?

LITERATURE REVIEW

We first review the concept of presence (i.e., cognitive, teaching, and social) in a K-12 blended learning setting using the Community of Inquiry (CoI) framework as a lens. Then we review the literature on student support in blended learning environments. In searching for literature, we found that research examining K-12 student-teacher interactions in blended learning environments is largely lacking. As a result, our review of the literature includes some research conducted in higher education that we found particularly insightful for our study.

Conceptualizing Presence

The idea of presence in learning is not new. Dewey (1938) advanced the idea that education is a social process requiring members of a learning community to interact as they engage in mutual inquiry. Dewey claimed there must be flexibility in this interaction, as an environment that is too structured prevents teachers and students from engaging in interactions that would lead to educative experiences. He recognized that this continuous interaction could result in constantly developing challenges in learning. Rodgers and Raider-Roth (2006) advocated that teachers understand the notion of *presence* as involving them in developing and reflecting upon deep knowledge of subject matter, children, and the learning process.

Dewey (1933; 1938) defined presence as teachers being fully attentive to students' intellectual reactions. Even so, he knew that teachers could not be present to all students at once, and that certain students demand a higher level of attention than others. Although Dewey's ideas were published long ago, the premise that education is grounded in social connectivity is easily applied to blended learning where connectivity reaches beyond the classroom community to online communities. Conceptualizing a classroom as a community represents a significant departure from the image of a traditional classroom (Akyol, Vaughan, & Garrison, 2011; Bingham, 2016; Graham, 2013).

Social Presence and Teaching Presence

Social presence was originally defined by Short, Williams, and Christie (1976) as the "degree of salience of the other person in the interaction, and the consequent salience of the interpersonal relationships" (p. 65). In addition, they stated social presence was dependent on the communication medium, even if it was in a face-to-face setting. However, the understanding of social presence in online learning now includes awareness of communication behaviors as one of its elements (Gunawardena, 1995). For instance, Rice (1993) stated that social presence could be established using verbal or

nonverbal communication. Similarly, Gunawardena's (1995) examination of social presence found that it was influenced by participants' verbal and nonverbal cues (e.g., facial expression, direction of looking, posture, and dress). This reinforced the point that social presence was a factor of both the media and communication behavior.

This definition was solidified in Garrison, Anderson, and Archer's highly popular Community of Inquiry (CoI) framework where Garrison and his colleagues defined social presence as participants' ability to "project themselves socially and emotionally as real people" (Garrison, Anderson, & Archer, 2000, p. 94) using any mode of communication (Garrison, 2003; Garrison et al., 2000). The CoI created an important theoretical bridge between the concept of social presence and Dewey's (1933; 1938) earlier work by highlighting a connection between social presence and cognitive presence—students' ability to construct learning collaboratively. In fact, one of the primary claims made in the CoI framework was that higher-order thinking skills and cognitive presence were unlikely to occur without high levels of social presence because it allowed participants to more freely and effectively exchange thoughts and ideas (Garrison et al., 2000). A decade after the seminal CoI framework article was published, Garrison et al. (2010) published a retrospective on the framework and explained that one of their primary contributions to research examining social presence was how social presence overlapped with cognitive presence.

The CoI framework also highlighted an important overlap with social presence and teaching presence. Teaching presence was defined as "the design, facilitation and direction of cognitive and social processes for realizing personally meaningful and educationally worthwhile learning outcomes" (Anderson, Rourke, Garrison, & Archer, 2001, p. 5). Teaching presence was also viewed as the force that established a critical community of inquiry because the establishment of cognitive presence and social presence are "dependent upon the presence of a teacher" (Garrison et al., 2000, p. 96). Although the CoI framework viewed social presence primarily as a student attribute, research has found that teachers' social presence was even more impactful on students' experiences than other students' social presence (Swan & Shih, 2005).

Community of Inquiry in K-12 Online and Blended Learning

Although CoI research has occurred largely in higher education, K-12 online and blended researchers are increasingly looking to the framework for guidance. For instance, de la Varre, Keane, and Irvin (2011) used the CoI framework to examine a model where students' interacted with both an online teacher at a distance and an on-site facilitator face-to-face. While the

framework proved helpful, the authors argued that it "needs to be expanded when applied to K-12 [online learning]" (de la Varre et al., 2011, para. 46). Similarly, Archer (2010), one of the original authors of the CoI framework, stated, "Needless to say, this attempt to broaden the scope of the CoI framework entails a new look at the overall rationale for the framework" (p. 69). This is especially true and difficult in K-12 blended learning environments where research using the CoI is essentially absent, and blended teaching competencies have yet to be fully established. The International Association for K-12 Online Learning (iNACOL) (Powell, Rabbitt, & Kennedy, 2014) published their initial attempt to establish these competencies and explained that if teachers are to be successful in blending they have to have specific mindsets, qualities, adaptive skills, and technical skills. However, they emphasized that their framework would change as more research is conducted.

Recently, evidence from research has shown that CoI can have a positive impact in blended environments (Akyol & Garrison, 2011). Teaching presence in blended settings can "enable, motivate, and inspire" (Mathews, 2016, p.5). The blended setting also allows teachers to exercise both social and teaching presence to provide more immediate feedback than would be possible with a traditional teacher-centric approach to instruction (Mathews, 2016; McKnight et al., 2016; Smith & Suzuki, 2015). In addition, Eteokleous, Ktoridou, and Orphanou (2014) found teaching presence in a blended approach helped students in the fifth grade to solve problems by thinking critically in a self-directed and collaborative way.

Blended Learning in K-12 Settings

Blended learning can be understood as a purposeful mix of face-to-face and online learning strategies (Garrison & Kanuka; 2004; Picciano & Seaman, 2007). Staker (2011) claimed that K-12 blended learning has grown to the point that it has begun to exert a disruptive influence on the way K-12 learning happens, changing it to a more learner-centered experience. Researchers contend this growth of K-12 blended learning is happening faster than growth in fully online learning settings, pointing to the increasing relevance of blended learning in the K-12 environment (Barbour et al., 2013; Graham, 2013; Picciano et al., 2012). Staker (2011) stated one reason for this development of K-12 blended learning is the increasing number of schools using blended learning in mainstream classes, whereas previously it had been largely used for credit recovery.

Blended Learning Approach in This Study

The current study was conducted in a mainstreamed 7th grade U.S. history class that examined content stretching from the post-Civil War Reconstruction period through modern day events. Students in the class, a mix of general and special education learners, used a blended learning approach

that provided them with a "personalized pacing and instruction" that met their individual needs (Bingham, 2016, p. 6). It followed an approach described by McGee and Reis (2012) as one in which teachers and learners work together by inter-mixing online and face-to-face strategies. In addition, the learning experiences were designed so that work could be done either individually or through collaboration with others (Grover, Pea, & Cooper, 2015). Our research addressed the following questions:

1. How does a teacher make decisions about st dent support in a blended learning setting?
2. What does it look like when a teacher actively attempts to assert presence in a K-12 blended learning environment?

METHODS

Our exploration of presence in a K-12 blended setting followed a narrative inquiry approach that analyzed interactions between the teacher, the primary author of this article, and his students as they pursued learning (Clandinin & Connelly, 2000; Clandinin, 2013).

Context of the Study: Narrative Beginnings

Since narrative inquiries are ongoing and reflexive, one of the touchstones for quality is a narrative beginning, where researchers share information that situates them in the purposes of their research (Clandinin & Caine, 2013). The teacher, Mark, has been teaching in public schools for 23 years. The last 12 years have been at the school where this research was conducted. The school where Mark works is in an urban/suburban transition setting, and draws students with diverse backgrounds and needs, including English Language Learners, students with special education needs, and students who are socio-economically challenged. Students' backgrounds closely matched the demographics of the school (Table 1).

Narrative inquirers may describe the way in which they gather data for discussion between teachers and researchers in a way that presents a flexible approach to sampling (Glassett Farrelly & Daniels, 2013; Lal, Suto, & Ungar, 2012). Our work, however, can be loosely described as a type of convenience sampling (Patton, 2002). The classroom curriculum that was the focus of the inquiry was designed using the Flex Model of blended learning (Powell et al., 2015) where: (a) online work serves as the main component of learning; (b) students engage in offline activities at times; (c) teachers act as guides or facilitators in the physical classroom; and (d) students move through the assigned activities with a high degree of control over the pacing, time, and place (Powell et al., 2015).

Students used technology for both learning and social interaction. Mark, the teacher, began the school year watching them learn and develop responsibility for their actions in the technologically-centered environment of his classroom, and soon decided there would be value in reflecting on what he saw in a deeper way. He had previously collaborated with Mary, the second author, on projects involving blended learning in K-12 settings, and felt her experience in this area, would provide an important external perspective. At the time, she was working with prospective teachers to use technologies to teach with and to help them consider the relational issues that arise as students learn content from programs and devices, rather than direct instruction.

Table 1
Demographic Information about Mark's Class and School

Demographic	Class (n=)	School (n=)
Total Students	27	1,690
English Language Learners (ESL)	12 (44%)	555 (33%)
Special Education	13 (48%)	273 (16%)
Free and Reduced Price Lunch Support	20 (74%)	1,111 (66%)
Racial/Ethnic Representation (n=)		
Asian	4 (15%)	252 (15%)
Black (Not of Hispanic origin)	1 (4%)	178 (11%)
Hispanic	20 (74%)	802 (47%)
White	2 (7%)	46 (25%)

We began our understanding of presence in its original Deweyan frame: as an experience of living alongside students in a classroom that was developing community (Dewey, 1933). As such, this work is grounded in the real worlds of individuals rather than in epistemology where an experimental world is imposed on a learning context. The real-world narratives that were collected as part of this study allowed us to view and reflect upon the blended classroom interaction that included the complexity of learner lives in motion. Presenting stories in this way caused final research texts to have a different feel than other academic texts. There is less certainty asserted, and more interest in reaching out to the reader. We intentionally strove to position our writing as talk resembling "family at the kitchen table" (Clandinin & Caine, 2013, p. 177) to preserve the primacy of intimacy and relational concerns that directed the narrative inquiry we conducted. This prompted us to recognize relational concepts important to the nurturing of a learning community (dialogue, off-task behavior, teacher and social presence, and collaboration) as they emerged throughout the year.

For more than a year, we met almost bi-weekly to discuss our teaching, share our stories, explore artifacts of our teaching such as assignments and systems, and think about how various theories of teaching and learning compared to our experiences. In addition, Mary visited Mark's class one time to add to her understanding of the interactions taking place. These stories were recorded as field notes, embedded in the reflective documents gathered from the collaborative writing in which we engaged. We stored the collected artifacts and field texts on a shared drive. Periodically we independently returned to them to write commentary to each other, pose questions to one another, and engage in collaborative thinking around classroom issues. This resulted in a deepening of reflection regarding student support as a relational act in a blended learning environment.

Narrative Inquiry Data Collection and Analysis

We modeled our research after other narrative inquiries in school-based settings (Ciuffetelli-Parker & Craig, 2015; Clandinin & Connelly, 1992; Craig & Ross, 2008; Xu & Connelly, 2010). Therefore, we used the typical analytical tools of *broadening* (i.e., research on blended learning), *burrowing* (i.e., research on presence), and *storying* and *restorying* (i.e., our stories about presence in blended learning over time) (Connelly & Clandinin, 1990). We also used some elements of *fictionalization* to mask identities of students and colleagues who were involved in the study. The goal of such fictionalization was not to obscure events, but to protect the anonymity of those involved as we sought to present the historical truth of human lives in a particular situation (Spence, 1984). In order to do this we used pseudonyms for students, and provided close estimation of the school demographics shared in Table One.

These techniques allowed us to attend to the three-dimensional inquiry space of our study. These dimensions involved the *temporal* happenings where field texts were composed over multiple interactions at multiple points in time. Further, as the field texts were co-composed, reflections about earlier life experiences were also included. Second, attention to *sociality* as a dimension occurred as we considered our thoughts, emotions, and moral responses as we burrowed into the stories. The third dimension -- *place* appeared in our work as we documented scenes important to our inquiry, which for us included places in the school, in the places where we lived, and cyberspace (Clandinin & Caine, 2013; Connelly & Clandinin, 2006).

The goal of using the three-dimensional narrative space was to avoid reducing our work into themes or codes, and instead, allow a narrative account to be written (Connelly & Clandinin, 1999). While this space is often seen as abstract, in the practical sense, doing this analysis meant that we:

1. Told stories about life in this blended classroom;
2. Recorded the stories;
3. Considered the way in which the stories connected to other stories we had considered, as well as to the literature we had read;
4. Discussed how the stories might impact what will happen over the next day, week, month, or longer;
5. Redrafted the stories to include our impressions and connections; and
6. Added notes to other stories that we found were connected.

As we composed our final research texts, we developed a narrative account with an introduction, two episodes, and a coda, which presents the end of the narrative and helps us understand the story (Labov, 1972; Ukrainetz & Gillam, 2009). The structure of this representation allowed us to make the temporal elements visible because the introduction depicts what was happening in the classroom leading up to a major event. The individual episodes are divided based on key points of reflection for us. They highlight specific events where we remembered our own experiences, made moral observations, remembered research literature we had read, and revisited previous understandings of the stories. In short, considering the stories' episodic qualities enabled us to look more carefully at learning continuity broadly while seeing the interaction deeply (Dewey, 1938).

Finally, the coda allowed us to look back and reassemble the pieces into a larger issue of presence. This approach reflected the Deweyan (Dewey, 1933, 1938) conceptual framework around relational interactions in classrooms. The goal in gathering the paired stories for narrative inquiry analysis was to uncover and then learn from the lived narratives of presence in

Mark's classroom, and then present them as a *constellation*—or a pattern revealing a larger image of a phenomenon on a school landscape (Craig, 2007). This constellation of stories was analyzed in contrast to, or held up against, stories of presence from previous research as they should apply in blended learning environments. By the time we had composed the full account, we felt we had attended to *classroom stories* that showed how all of us (Mark, Mary, and the students in this class) were engaged in classroom life. We felt this was more meaningful than simply telling the *story of a classroom* (Clandinin & Connelly, 1996; Craig, 2001).

FINDINGS

Over the course of the year, many experiences and stories were shared and discussed. During those discussions, we identified seven main ideas regarding the teacher's efforts to support his students in a blended environment:

1. **Maintaining diligent dialogue** - Mark and the students engaged in dialogue, as it was needed to advance learning. The dialogue process also involved interaction between Mark and Mary to make meaning of study stories.
2. **Redirecting off-task behavior** - Students got off task in various ways, and needed to be led back into productivity. This approach varied by both student and situation.
3. **Establishing social presence** - Participants (students, Mark, and Mary) worked to create a sense of community where they could be seen as real people. This led to verbal and nonverbal communication focused on learning.
4. **Collaborating** - The students worked with the teacher, and each other, related to both content and learning strategies.
5. **Crossing boundaries between virtual and actual worlds, and between teacher and student worlds** - Learning was promoted by working in both online and face-to-face environments, sometimes at the same time. This was most effective when teachers and students used their social presence to exist with the other to promote learning.
6. **Approaching orderliness without achieving it** - The learners and teacher worked together to control action to promote learning that is maximally efficient, but never stay at that point.
7. **Solving problems pragmatically** - Problems that came up were solved, and then additional problems that emerged from that solution .

In order to illustrate these key elements we share a constellation—a weaving of stories, that were identified during data analysis (Craig, 2007). This constellation illustrates Mark's support of students with various types of presence as he and they moved back and forth between the virtual and physical classroom spaces of a blended learning environment. The two stories we share are (1) *The Power of Emoji*; and (2) *The Boy who Smiled Too Much*. These two stories were selected from the many identified over the course of the year because we believe they best embody the seven themes shared above. We then unpack our thinking narratively by reflecting on how social presence, the main aspect of the CoI framework we followed, was reflected in our findings.

Story 1: The Power of Emoji

During the school year when these reflections were being conducted, three of Mark's students—Erica, Estefanie, and Roxy—struggled to engage in the self-directed learning activity that had been designed. They were using modules, which allowed content to be divided into manageable chunks, to investigate the Great Depression era in the United States. Mark used his teaching presence to manage and direct their work by providing each of the girls with note guides that were supposed to make it even easier for them to develop their content knowledge (Garrison, 2003; Garrison & Kanuka, 2004). When that strategy did not appear to work, he provided the girls a simple set of directions on how to use the notes to work in the modules.

When these supports proved unprofitable, Mark realized the need to make a change. After all, he was interested in engaging learners cognitively, and those students were not displaying any signs of the self-regulation, self-efficacy, cognitive engagement, or motivational investment that researchers suggested they should value (Shea et al., 2013). He reviewed the resources originally provided to students, the modifications subsequently given, and designed a simpler form of the note guide. This time, it was more directly related to the resources he wanted them to use, and it provided the students with the links to needed sources.

Even with these new supports, Mark thought he was making little headway in establishing the active learner cognitive presence he sought. After more reflection, he promised them the chance to work together. He did this despite concern that this collaborative opportunity would result in more off-task behavior. Mark reflected on the coaching and design decisions he had made up to this point, and became concerned Erica, Estefanie, and Roxy would perceive this offer of collaborative work as just another effort to control them, rather than working with them to co-construct presence.

Despite his concerns, these students quickly became cooperative. They sat together, made necessary choices among the materials presented, and went right to work. From this incident, Mark realized that it would be fine

to be flexible as he sought to elicit learner engagement and encourage his students to be productive (Garrison, 2003; Garrison & Kanuka, 2004). Although this was an encouraging experience, it did not last. Several days later, he was confronting a lack of engagement and wavering cognitive presence.

This time, the strategy Mark selected was to attend more directly to student engagement. He placed a smiley face emoji on the students' collaborative work documents in the spot where their cursors indicated they had been working, but none where there was no indication of active engagement. Mark did this several times during class to provide visual feedback, encouragement, and coaching. He decided to use a variety of emoji with different facial expressions (sad, happy, disappointed), some of them being memes saying things like "I'm watching," and "Do your work now." The students seemed to appreciate this playfulness and would increase work effort. For the next several weeks when the effort and concentration of students, particularly Erica, Estefanie, and Roxy, lagged again, Mark utilized emoji to communicate with them, even when they were in the same classroom space. The students often laughed aloud in response when they saw the emoji appear while they were working. Even though they had the power to remove these faces from their online work document, they usually did not. Sometimes they would even add a response on their document with an image of their own. This strategy continued to prove beneficial over the last four units of the year, covering a period of three months. It seemed Mark had developed a strategy that was sustainable over time.

Story 2: The Boy Who Smiled Too Much

Attending to student emotional needs and finding strategies that work over long periods of time was of critical importance to Mark. In addition to providing orderliness in the classroom, Mark became interested in focusing his reflections on paying greater attention to student emotions to learn more about presence. From these reflections, a narrative about Rafael titled "The boy who smiled too much" was developed.

Part One

Learners were working for about two weeks on a self-paced, module-based unit on the Spanish-American War that included eight separate modules. The resources for each module were contained on Google Slides presentations, which students could use at their own pace. It became apparent Rafael had completed none of the formative assessments paired with each module. He should have been analyzing relevant primary sources to prepare for collaboration with other learners, but instead had been spending his time on non-academic tasks, such as looking at online games and advertisements for athletic shoes. In response, Mark held a private conference with Rafael

at his teacher's desk in the corner of the room, out of earshot of most of the rest of the students. Together, they came to an agreement regarding what Rafael should do to be successful in class that day. During the conference, Rafael was very respectful and cooperative, and Mark believed he understood how to improve, so he sent him back to work at his desk with his computer. A few minutes later, Mark noticed that Rafael, who was usually happy and had a confident grin, was smiling much more than one should when reviewing graphic primary resources about war. Again, Mark spoke with Rafael, collected his computer, checked the browsing history, and found Rafael had been visiting various video and game sites not connected to the learning task at hand.

Part Two

The realization Rafael was once again off task inspired another conversation, focused on what would help him engage appropriately in learning. At the end of it, Rafael chose to move his seat closer to a group of friends who he thought would help him focus more, make progress, and even provide the opportunity to serve them by giving support of his own. Rafael went on to answer seven out of eight questions correctly regarding the analysis of a political cartoon related to the Spanish-American War. Upon seeing this high score, Mark complimented him on his improvement, and questioned him to make certain he knew the content and had not been cheating. He also reminded him to be attentive to the fact that his teacher could see browsing history, and to make sure that if examined, it would be full of site visitations related to the assignment.

Part Three

After finishing the Spanish-American War unit, the class began to investigate the history of the 1920s in the United States, using a module-based blended approach like that employed in the previous unit. Again, Rafael, still sitting with his friends, did not seem to be working through the subject matter in a timely manner that would allow him to produce the final project, a multimedia presentation on a topic from 1920's U.S. history. Mark considered moving him away from those individuals who seemed to be a distraction but decided to take an approach that would better serve Rafael's social presence needs. To gather possibly relevant information, Mark looked at other learners' work, including Google-based formative assessments and shared work documents. Judging by these data, one learner in the class of 27, David, was excelling in both the pace and accuracy of his work. Mark proposed a system of peer collaboration to David, making certain he understood the limits his support could take without crossing over into helping his friends cheat. When David accepted the responsibility to act as a mentor, he suggested sharing work documents with the peers he was helping

and moving desks to the hallway to promote concentration as he worked with them. Mark listened to the plan, considered it, and accepted. The first student selected to receive this support was Rafael, the one most in need. With David's help, he began finishing his work on time, and it was more complete than he had previously done. He even began to get ahead of the expected pace on the modules. Other peers were watching and began to ask for the chance to work with David. It seemed the opportunity to work in the hallway with a peer coach was an attractive learning option for some. Small groups of those students interested in working with David were formed, and Mark considered the multimedia presentations that emerged during this activity to be among the most sophisticated ever produced in this class. An additional benefit was that David's own work quality improved as he developed his skills through the coaching activities.

Erica, Estefanie, Roxy, and Rafael improve

These two stories present a picture of student improvement. Erica, Estefanie, and Roxy overcame the struggle to engage in self-directed learning through a teacher-designed, iterative-support process. It started with several versions of differentiated note guides, and it wound up including collaborative work and teacher use of motivational emoji placed on shared work documents. Rafael's ability and desire to work improved due to interaction with both his teacher, Mark, and his friend, David.

While improvement in learner work was noted in both cases, it did not stay at the improved levels on its own. There was a need for Mark to continue exercising his social and teaching presence to encourage student cognitive presence. The improved learner abilities made this process of support easier, but it was not perfect. Mark believed that there needed to be continual support of students as they developed the self-regulation ability to control their own effort and learning (Shea & Bidjerano, 2010; Zimmerman, 2000).

Coda

We guided this study by using Dewey's conceptions of continuity and interaction, coupled with Rodgers and Raider-Roth's (2006) definition of presence as it occurred during interaction with students. Along these understandings, we also considered the work of Short et al. (1976), Gunawardena (1995), and Garrison et al. (2000), as well as others who offered more technical, but still community-oriented, definitions of presence for learning.

In order to carry out the research, we followed a narrative inquiry approach to examine the concept of presence in a blended middle-level classroom. The stories gathered as part of this inquiry encompass themes identified as we reflected throughout the yearlong study. These themes included concepts such as diligent dialogue, off-task behavior, teacher and social presence, and collaboration.

In the two particular stories, and throughout the year, Mark observed the constant need to be vigilant in having follow-up conversation with students as they together faced complicated issues that required sustained dialogue. For instance, in the second story shared above, Mark spoke with Rafael at the start of a unit based on observed off-task behavior and believed he had counseled him so that he would be cognitively engaged. Rafael's continued lack of productivity required a review of browsing history and another conversation about appropriate learning focus. During this conversation Rafael took control of his own learning by deciding to move his seat near students likely to help him concentrate properly. Rafael did improve focus and achievement, and Mark spoke to him to make certain he knew the content and to compliment him on the improvement. Then, in the next unit, Rafael's inattention to learning recurred. Mark had a conversation with David, a more motivated and organized student, inviting him to mentor Rafael and other students. Rafael welcomed the invitation to be mentored. This dialogue of support covered a period of five weeks, and other similar conversations with Rafael and other students continued throughout the year. It made it clear to Mark that productive teacher presence was not a one-time event, but a continual process that followed a flexibly iterative approach.

Additional blended learning thoughts

In this section of the Coda we share thoughts from other units in the same school year that are related to the two shared stories. Together the original stories and these additional thoughts reinforce the importance of an intentional approach to the use of social and teaching presence when supporting students in blended learning environments.

Early in the year, the students studied Westward Expansion in the U.S. by using a reading support tool housed in a wiki. Students worked at their own pace, and were monitored and supported using daily face-to-face debrief discussions, discussion board interactions, and online formative assessments. Mark had conferences with individuals or groups when this data indicated that either coaching was needed or that their off-task behavior called for redirection. In effect, Mark used his social and teaching presence to engage students during these conferences, when monitoring online work documents, and while circulating around the classroom. In this unit, Mark worked with three students who disrupted the work of peers. He counseled them individually and as a group, allowed them to work together, and gave them the chance to work on individually designed projects. None of these strategies worked consistently, and Mark decided it was best to work with them to develop a learning approach that focused more on effort than on content mastery.

Later in the year, a module-based approach with brief Google Form assessments was used to learn World War II history. The approach proved effective in allowing Mark and the students to monitor content understanding and work pacing. Mark collaborated with students to support them in their work when necessary. Once again he found it useful to allow students struggling with content understanding and pacing to collaborate on shared documents. In addition, it was again necessary to redirect students pulled off task by the available technology. It appeared during this unit that one student had gone off task by using Google Earth to visit one particular town in South America over multiple class periods. Mark took a closer look at the browsing history and saw that she did not do this until after students had been told to shut down for the day. It appeared she had used a strong sense of self-regulation. Mark realized the proper use of teaching presence makes no assumptions about student actions but considers relevant data.

Summary of Coda Stories

As demonstrated in the stories shared above, Mark diligently worked to limit students' off-task behavior, a challenge he faced daily throughout the year. For instance, Mark found that as the year progressed, there were increasing distractions, as evidenced by student interest in things such as games and products as described in story two. Mark considered what he understood about presence and what he hoped he and his students would be capable of from the perspective of that presence. As mentioned earlier, this reflection led to recognition of seven main ideas we found relevant to consideration of student support in the blended settings in his classroom: (1) maintaining diligent dialogue, (2) redirecting off-task behavior, (3) establishing social presence, (4) collaborating, (5) crossing boundaries between virtual and actual worlds, and between teacher and student worlds, (6) approaching orderliness without achieving it, and (7) solving problems pragmatically.

Maintaining diligent dialogue

The importance of diligently engaging in dialogue appeared in this study in multiple ways. As researchers, it was the bi-weekly dialogue between Mark and Mary that identified these themes as they made notes on a shared document and discussed them via Google Hangout. In fact, it was these discussions which identified diligent dialogue with students as one of the main ways in which Mark supported them. We recognized Mark's willingness to have one more conversation about work and try one more strategy to help him exert the type of presence that sustained orderliness in his classroom environment This diligent dialogue with students was centered on placing them in the best position possible to experience cognitive growth. One of the key common elements was that it was not a one-time occurrence, but an

iterative process that involved Mark and his students as they talked, used the data that the devices and programs generated, and recognized each other's facial expressions that at times could not be predicted.

Off-task behavior

It is logical that some off-task behavior would be an aspect of student behavior in blended learning. However, we did not begin our discussions of blended learning in Mark's class looking for it. In fact, when it was recognized, it became apparent there was no one way that it could be addressed. At times, the main goal was simply to get the students back on task. In other instances, the goal was to get the student(s) to not only get back on track but to take active responsibility for regulating their own work.

There were two interesting realizations related to off-task behavior. One was that it became clear that not all off-task behavior should be dealt with in the same way. Sometimes students' off-task behavior was due to being distracted themselves, and at other times it was due to students actively seeking to cause disruptions. A second realization was that behavior must be analyzed thoroughly, using digital means and face-to-face dialogue, to make certain it was off-task before approaching the student.

Social presence

The social presence component of the CoI appeared in our study in various ways. One was that it varied by media used, such as shared documents, online discussion boards, image exchanging, and face-to-face interaction (Short et al., 1976). The use of social presence also varied based on the learning contexts (Short et al., 1976), which included face-to-face, online, and a mix of both elements.

We also noticed that commenting on work in a supportive way was more effective when leaving comments attached to the exact place where the student was working on their online document at the time. The use of emoji was seen to be more effective in the combined environment as Mark could place the emoji on the shared work document, watch for a reaction, and support it immediately with a combination of verbal and body language.

Social presence interaction created a sense of community in the study classroom as well (Gunawardena, 1995). At various times we saw students use their social presence to form a community of practice that employed mutual engagement to accomplish learning tasks (Mor, Noss, Hoyles, Kahn, and Simpson, 2006).

It proved to be difficult, in most cases, to see the exercise of social presence as a separate entity from teaching presence in Mark's practice of blended learning. He used his teaching presence to recognize the need to make changes in the learning program when necessary. However, to do that successfully, he had to use a different social presence in each case.

Sometimes this was done with humor, sometimes in a gentle but serious way, and sometimes with more force. Each student experienced the approach best suited to him or her.

An additional realization related to Mark's exercise of teaching presence was that it followed a constant iterative approach. The fact this was necessary became clear early in the school year during which the study was conducted. Recall that the work with Rafael required several different forms of support, each implemented when the previous one was no longer working.

Collaboration with students

Collaboration turned out to be an especially important aspect of support for blended learning in his class. It is possible that Erica, Estefanie, and Roxy would never have engaged meaningfully in learning if they had not been allowed to work collaboratively. Rafael may never have broken the cycle of distraction without the opportunity to collaborate with David, and get some peer coaching. The Google Forms assessment structure used in some units supported both learner-teacher and learner-learner collaborative review of work which led to improvement.

Approaching orderliness without achieving it

Another critical realization for us as we reflected on Mark's classroom was the relationship between orderliness and the interactions necessary to tip the class into continuity (Dewey, 1933;1938). For him to maintain a presence, orderliness had to be approached, but it did not need to be achieved. Whenever Mark came close to continuity, an interaction between not just students, but students and their computers, put orderliness just out of reach. When the students were all quiet and working, it was time to look at their data to see what they were doing. If the students were talking and clearly not working on the task at hand, it was time to hold a conversation. These types of routines and patterns supported students in taking responsibility themselves and at times for one another.

Mark's experiences complicate community building with groups of students. We could see so clearly that students work not just with each other but with devices that had more options available to them than the typical accouterments of classroom technology such as pens and pencils. Mark was trying to keep students working appropriately, manage the data that was immediately available to him both on and offline, and evaluate the viability of the curriculum he had designed. These responsibilities meant that he was never at any point trying to support every student at the same time. He was trying to teach individuals and small groups when data, such as browsing history and formative assessment, told him that students were struggling.

Noteworthy is the fact that when students disengaged, Mark could not take their computer away. He could not confiscate computers from misbehaving students in a blended setting any more than a teacher in a traditional classroom would take pencils and paper away from students failing to live up to learning behavior expectations. Instead, Mark had to use positive teaching presence to talk to his students about their behavior and get them positioned to work again as soon as possible.

Boundary crossing in virtual and actual world

Besides data monitoring, Mark was paying a high amount of attention to what students were doing—from their actions to their facial expressions. In fact, his engagement with those expressions crossed boundaries between virtual and actual classroom spaces. Unlike a typical smile, which can be kept or lost in memory, the emoji becomes a durable and public monument to co-constructed social presence. Even Rafael's smile, which was noticed by Mark and called remarkable by Mary in her field notes, was ultimately short-lived.

Pragmatic Problem Solving

Also interesting was the way in which we saw evidence of Dewey's (1933) pragmatic argument that solving one problem in an educational setting simply paves the way for another and ultimately leads to a kind of circularity. This was certainly the case for Mark's classroom where it was clear that student support is not a one-shot enterprise.

Students were not paying attention, so Mark made support materials. When that did not work, he let the students work together. When the students were less successful working together, Mark developed ways to return them to individual work. When the students wanted to choose classmates to work with, he allowed them to do so and witnessed greater learning.

DISCUSSION

Elements of the CoI (Garrison et al., 2000) were identified during our study as ways in which Mark made decisions about student support and enacted strategies to help students in a blended learning setting. These strategies included: (a) using teacher presence to manage and direct student work iteratively; (b) taking a flexible approach to activate learner presence and cognitive engagement; (c) developing student self-regulation; and (d) promoting non-verbal social and teaching presence to support students.

In accordance with Goodyear et al.'s (2001) findings, Mark used teacher presence in an iterative way to direct student work. Dewey's (1938) view that problems experienced in classrooms frequently lead to others was particularly relevant as we considered student engagement patterns. In analyzing the data, we confirmed that Mark's teaching presence included design

and organization before and during learning components that Anderson et al. (2001) described as part of an active teaching presence. Our findings also aligned with previous research suggesting that teaching presence in a blended setting involves a flexible process of design and redesign (Arbaugh, et.al., 2008; Garrison, 2003; Garrison & Kanuka, 2004). Teaching presence was critical for engagement with the learning activities and establishment of a caring and supportive social presence. These aspects of teaching presence, employed in a flexible manner, helped Mark meet student needs.

Short et al. (1976) spoke to the need to employ social presence that varied based on context, and the subjective reactions of individuals. Mark realized a flexible approach to bringing his combined teaching and social senses of presence to the students was necessary. The reactions and settings in which they occurred varied. They required a flexible approach in order to activate learner presence and promote cognitive engagement. The more students developed their presence and improved engagement, the greater control they had over their own learning.

Shea and Bidjerano (2010), who described learner presence as a construct to promote cognitive engagement, mentioned the relevance of learner self-regulation. Mark found benefit in promoting learner self-regulation to confront low levels of student engagement in their cognitive tasks. The benefit of this approach has been supported by Zimmerman's (2000) work on student self-regulation, which found a positive influence on student achievement when they were prompted to exercise control over their own learning. Mark noticed the students were, at times, exhibiting what researchers have described as forethought, planning, and reflection focused on learning activities and associated goals (Anderson et al., 2001; Garrison, 2003; Shea et al., 2013). Other researchers discovered an apparent link between visually based instructor presence, such as the face-to-face and emoji strategies used by Mark and improvement of learner self-regulation (Borup, West, & Graham, 2013).

The work of Rice (1993) pointed out non-verbal interaction, such as Mark's emoji use, could be part of social presence. In addition, Gunawardena's (1995) examination of social presence found presence could be influenced by the capacity to transmit non-verbal cues, such as "facial expression, direction of gaze, and posture" (p. 148). We found this non-verbal social presence Mark used to be fundamental to engaging and supporting learners.

IMPLICATIONS FOR PRACTICE AND RESEARCH

Although we do not aspire to generalize our findings, the descriptions we have provided and the work we have done in overlaying research on presence in an authentic blended learning classroom situation suggest important implications. These implications are for practice, research, and policy. Each will be discussed in turn.

Practice Implications

Mary noticed that Mark emerged from this work not exhausted, but energized. Reflecting on his classroom teaching helped him see his progress with students in ways that his other forms of data, such as summative assessment scores, could not show. In practical settings, teachers need to find ways to live in their classrooms in ways that bring them joy. If they cannot do this, the work of supporting students constantly as they engage with technologies over time can become overwhelming.

Since Mark was generating his own reflective data, selected by him, captured on his terms, and volitionally shared with Mary, he was also able to manage his engagement—his goal for his students. Mark participated in the curriculum, and was responsible for maintaining an environment where students could learn, but he also acted as a unique individual in his classroom space, which is paramount for presence as articulated by Dewey (1933; 1938).

In terms of professional development, teachers in Mark's circumstances might also be sustained by the opportunity to be part of a CoI themselves. In these online professional development networks, teachers could build relationships and solve problems of practice together. They would also gain experience in internet-mediated learning that would help them understand how to better build communities with and for students.

Research Implications

Although this study derives importance from its extended data collection period, there is more research to do in terms of making connections between learner support, presence, and building CoIs in K-12 blended settings. Below are several recommendations for future research.

Lam's (2015) ideas about learner autonomy as the source of intrinsic motivation to engage with content was difficult to sustain in Mark's classroom. Many, if not most, of his students at one point had to be supported directly by Mark to continue to work. Further, tool fatigue (Croxall, 2014) does not explain the periodic waning of learner effort to direct their own learning. Future research might confront and address student disengagement, even disenchantment with using web-based curriculum for most of their

instruction. Further, since middle level learners are early adolescents with cognitive, physical, and social development needs, it would be helpful to have additional empirical understandings about student support in middle level blended learning environments. What are appropriate expectations for student engagement and learner-centered project development with technologies? How long can students sit at a computer at different ages? What support do students at this age need to work productively in groups while designing and carrying out digital projects?

In addition, Mark did not have unlimited autonomy in the curriculum he made for students, although he did have some choice. Often the topics, such as the Spanish-American War were selected by Mark's professional learning community and/or district or state standards. This is likely different from higher education where it is less likely that there are lists of specific content to be taught in classes. What researchers need to know is how, whether, and to what extent K-12 teachers select and design blended curriculum with student engagement and learner support in mind. Additional research projects should also focus on teachers' attempts to build and maintain true CoIs where students have more control over their learning (Horn & Staker, 2013). When all students are truly doing different projects about different topics and making different products to display their learning, what does learner support look like?

Policy Implications

Blended learning is a fast-growing branch of online learning (Barbour et al., 2013; Graham, 2013; Picciano et al., 2012). Policies around blended learning have not kept up with practice at the local or state level. What is evident is that schools are scrambling to use blended learning in the hopes of delivering high-quality educational experiences that also leverage technology as a novelty for attracting student attention and 21st century skills. Yet, policies that consider the subtleties of student support are lacking. As new local and state policies are drafted and adopted, makers of these policies should consider whether they want technology to be merely used for content presentation or used to promote CoIs (Garrison et al., 2000); whether they want teachers who manage students, or students who manage their learning (Horn & Staker, 2013); whether they want learning environments where student support is orientated toward engagement, or student support is oriented toward subject matter competence (Doyle & Carter, 1984; Osher et al., 2010). The answers to such questions will have a considerable influence on how teachers and students see their roles and responsibilities in blended learning classrooms and how the notion of learner support is interpreted and perceived in relationship to technology.

CONCLUSION

Blended learning is growing in use and significance in K-12 schools. It is purposefully fostering cognitive, social, teaching, and learning presence is one strategy for meeting the challenges of these relatively new learning environments (Garrison et al., 2000; Shea & Bidjerano, 2012). This narrative inquiry explored presence in a blended learning environment. This work illustrated the connections among various technical definitions of presence while living out a presence in a philosophical, relational frame.

In addition, the current work offered a view of teaching and social presence used to advance collaboration among learners as well as between learners and their devices. The stories shared in this article depicted the way in which teaching and social presence supported learners in making use of cognitive development opportunities, classroom rhythms, and ways of being, even in classrooms with both actual and virtual spaces. As researchers and educators, we developed greater understandings about the ways in which learner and teaching presence exerted continuity between and among students and a teacher. We also identified ways in which students were empowered to exercise and develop presence.

While this connection can be encouraging to researchers and practitioners interested in supporting the growth of K-12 blended learning, generalization was not our goal. Instead, we wanted to provide an ontological, experiential view of presence as it was enacted and negotiated in Mark's classroom. The observations that we presented and reflected on should not be separated from the contexts in which they occurred. Nevertheless, we hope that this exploration of presence in this classroom helps shape research and practice that will improve teaching and learning experiences in a blended environment.

References

Akyol, Z., & Garrison, D. R. (2011). Understanding cognitive presence in an online and blended community of inquiry: Assessing outcomes and processes for deep approaches to learning. *British Journal of Educational Technology, 42*(2), 233–250.

Akyol, Z., Vaughan, N., & Garrison, D. R. (2011). The impact of course duration on the development of a community of inquiry. *Interactive Learning Environments, 19*(3), 231–246. http://doi.org/10.1080/10494820902809147

An, Y.-J., & Reigeluth, C. (2011). Creating technology-enhanced, learner-centered classrooms: K–12 teachers' beliefs, perceptions, barriers, and support needs. *Journal of Digital Learning in Teacher Education, 28*(2), 54–62. http://doi.org/10.1080/21532974.2011.10784681

Anderson, T., Rourke, L., Garrison, D. R., & Archer, W. (2001). Assessing teaching presence in a computer conferencing context. *Journal of Asynchronous Learning Networks, 5*(2), 1-17.

Arbaugh, J. B., Cleveland-Innes, M., Diaz, S. R., Garrison, D. R., Ice, P., Richardson, J. C., & Swan, K. P. (2008). Developing a community of inquiry instrument: Testing a measure of the Community of Inquiry framework using a multi-institutional sample. *Internet and Higher Education, 11*(3–4), 133–136.

Archer, W. (2010). Beyond online discussions: Extending the community of inquiry framework to entire courses. *Internet and Higher Education, 13*(1–2), 69. http://doi.org/10.1016/j.iheduc.2009.10.005

Barbour, M., Archambault, L., & DiPietro, M. (2013). K–12 online distance education: Issues and frameworks. *American Journal of Distance Education, 27*(1), 1–3.

Bingham, A. (2016). Drowning digitally? How disequilibrium shapes practice in a blended learning charter school. *Teachers College Record, 118*(1), 1–30.

Borup, J., West, R. E., & Graham, C. R. (2013). The influence of asynchronous video communication on learner social presence: a narrative analysis of four cases. *Distance Education, 34*(1), 48–63.

Ciuffetelli-Parker, D. C., & Craig, C. J. (2015). An international inquiry: Stories of poverty–poverty stories. *Urban Education*, *52*(1), 120 –151.

Clandinin, D.J. (2013). *Engaging in narrative inquiry*. New York, NY: Routledge.

Clandinin, D. J. & Cain, V. (2013). Narrative inquiry. In A. A. Trainor & E. Graue (Eds.) *Reviewing qualitative research in the social sciences* (pp.166-179). New York, NY: Routledge.

Clandinin, D. J., & Connelly, F. M. (1992). Teacher as curriculum maker. In P. W. Jackson (Ed.), *Handbook of research on curriculum* (pp. 363–401). New York, NY: Macmillan.

Clandinin, D. J., & Connelly, F. M. (1996). Teachers' professional knowledge landscapes: Teacher stories—stories of teachers—school stories—stories of schools. *Educational Researcher, 25*(3), 24–30.

Clandinin, D.J., & Connelly, F.M. (2000). *Narrative inquiry: Experience and story in qualitative research*. San Francisco, CA: Jossey-Bass.

Connelly, F. M., & Clandinin, D. J. (1990). Stories of experience and narrative inquiry. *Educational Researcher, 19*(5), 2–14.

Connelly, F. M., & Clandinin, D. J. (1999). *Shaping a professional identity: Stories of educational practice*. New York, NY: Teachers College Press.

Connelly, F. M. and Clandinin, D. J. (2006). Narrative inquiry. In Green, J., Camilli, G. and Elmore, P (Eds.), *Handbook of complementary methods in education research* (pp. 375-385). Mahwah, NJ: Lawrence Erlbaum.

Craig, C. (2001). The relationships between and among teachers' narrative knowledge, communities of knowing, and school reform: A case of "The Monkey's Paw". *Curriculum Inquiry, 31*(3), 303-331.

Craig, C. J. (2007). Story constellations: A narrative approach to contextualizing teachers' knowledge of school reform. *Teaching and Teacher Education, 23*(2), 173-188.

Craig, C. & Ross, V. (2008). Cultivating teachers as curriculum makers. In F. M. Connelly (Ed.), *Sage handbook of curriculum and instruction* (pp. 282–305). Thousand Oaks, CA: Sage.

Croxall, B. (2014). Tired of tech: Avoiding tool fatigue in the classroom. *Writing & Pedagogy, 5*(2), 249–268.

de la Varre, C., Keane, J., & Irvin, M. J. (2011). Dual perspectives on the contribution of on-site facilitators to teaching presence in a blended learning environment. T*he Journal of Distance Education, 25*(3), 1-14.

Dewey, J. (1933) *How we think*. Buffalo, NY: Prometheus Books.

Dewey, J. (1938). *Education and experience*. New York, NY: Collier Books.

Doyle, W., & Carter, K. (1984). Academic tasks in classrooms. *Curriculum Inquiry, 14*(2), 129-149.

Eteokleous, N., Ktoridou, D., & Orphanou, M. (2014). Integrating wikis as educational tools for the development of a community of inquiry. *American Journal of Distance Education, 28*(2), 103–116. http://doi.org/10.1080/08923647.2014.896572

Garrison, D. R. (2003). Cognitive presence for effective asynchronous online learning: The role of reflective inquiry, self-direction and metacognition. In J. Bourne & J. C. Moore (Eds.), *Elements of Quality Online Education: Practice and Direction* (pp. 47–58). Needham, MA: The Sloan Consortium.

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., Anderson, T., & Archer, W. (2010). The first decade of the community of inquiry framework: A retrospective. *The Internet and Higher Education, 13*(1–2), 5–9. http://doi.org/10.1016/j.iheduc.2009.10.003

Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *Internet and Higher Education, 7*(2), 95–105.

Glassett Farrelly, S., & Daniels, E. (2013). Understanding alternative education: A mixed methods examination of student experiences. ProQuest Dissertations and Theses, Ed.D.(Dissertation/Thesis PG-), 106–121. Retrieved from http://search.proquest.com/docview/1318655891?accountid=13042 NS -

Goodyear, P., Salmon, G., & Steeples, C. (2001). Competencies for Online Teaching: *Education Training & Development, 49*(1), 65-72.

Graham, C. (2013). Emerging practice and research in blended learning. In M. G. Moore (Ed.), *Handbook of distance education 3rd Ed.* (pp. 333–350). New York, NY: Routledge.

Grover, S., Pea, R., & Cooper, S. (2015). Designing for deeper learning in a blended computer science course for middle school students. *Computer Science Education, 25*(2), 199–237. http://doi.org/10.1080/08993408.2015.1033142

Gunawardena, C. N. (1995). Social presence theory and implications for interaction and collaborative learning in computer conferences. *International Journal of Educational Telecommunications, 1*(2/3), 147–166.

Horn, M. B., & Staker, H. (2011). *The rise of K-12 blended learning*. The Christensen Institute. Retrieved from http://www.christenseninstitute.org/wp-content/uploads/2013/04/The-rise-of-K-12-blended-learning.pdf.

Horn, M. B., & Staker, H. (2013). *Is K-12 blended learning disruptive? An introduction to the theory of hybrids*. San Francisco, CA.

Labov,W. (1972). The transformation of experience in narrative syntax. In W. Labov (Ed.), *Language in the inner city* (pp. 354-397). Philadelphia: University of Pennsylvania Press.

Lal, S., Suto, M., & Ungar, M. (2012). Examining the potential of combining the methods of grounded theory and narrative inquiry: A comparative analysis. *The Qualitative Report, 17*(41), 1–22. Retrieved from http://www.nova.edu/ssss/QR/QR17/lal.pdf

Lam, J. (2015). Autonomy presence in the extended community of inquiry. *International Journal of Continuing Education and Lifelong Learning, 81*(1), 39-61.

Mathews, K. M. (2016). *Transformative models in K-12 education: The impact of a blended universal design for learning intervention an experimental mixed methods study*. (Doctoral Dissertation) Retrieved from PQDT Open. (Accession Number 137; 10128128)

McGee, P., & Reis, A. (2012). Blended course design: A synthesis of best practices. *Journal of Asynchronous Learning Networks, 16*(4), 7–22.

McKnight, K., O'Malley, K., Ruzic, R., Horsley, M. K., Franey, J. J., & Bassett, K. (2016). Teaching in a digital age: How educators use technology to improve student learning. *Journal of Research on Technology in Education, 48*(3), 194–211.

Mor, B. Y., Noss, R., Hoyles, C., Kahn, K., & Simpson, G. (2006). Designing to see and share etructure In number sequences. *International Journal for Technology in Mathematics Education, 13*(2), 65–78.

National Education Association (NEA). (2013). *NEA policy statement on digital learning.* Retrieved from http://www.nea.org/home/55434.htm . Washington, DC.

Osher, D., Bear, G.G., Sprague, J.R., Doyle, W. (2010). How can we improve school discipline? *Educational Researcher, 39*(1), 48-58.

Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.

Picciano, A. G., & Seaman, J. (2007). *K-12 online learning: A survey of U.S. school district administrators.* Sloan Consortium. Needham, MA. Retrieved from http://sloanconsortium.org/sites/default/files/K-12_Online_Learning_1.pdf

Picciano, A.G., Seaman, J., Shea, P., & Swan, K. (2012). Examining the extent and nature of online learning in American K-12 education: The research initiatives of the Alfred P. Sloan Foundation. *The Internet and Higher Education, 15*,127-135.

Powell, A., Rabbitt, B., & Kennedy, K. (2014). iNACOL Blended Learning Teacher Competency Framework. *International Association for K-12 Online Learning*. Retrieved from http://www.inacol.org/wp-content/uploads/2015/02/iNACOL-Blended-Learning-Teacher-Competency-Framework.pdf

Powell, A., Watson, J., Staley, P., Patrick, S., Horn, M., Fetzer, L., Verma, S. (2015). Blending Learning: The Evolution of Online and Face-to-Face Education from 2008 – 2015. *International Association for K-12 Online Learning*. Retrieved from http://www.inacol.org/resource/blending-learning-the-evolution-of-online-and-face-to-face-education-from-2008-2015/

Rice, R. E. (1993). Media appropriateness: Using social presence theory to compare traditional and new organizational media. *Human Communications Research, 19*(4) 451-484.

Rodgers, C., & Raider-Roth, M. (2006). Presence in teaching. *Teachers and Teaching: Theory and Practice, 12*(3), 265-287.

Rowe, M., Bozalek, V., & Frantz, J. (2013). Using Google Drive to facilitate a blended approach to authentic learning. *British Journal of Educational Technology, 44*(4), 594–606. http://doi.org/10.1111/bjet.12063

Shea, P., & Bidjerano, T. (2010). Learning presence: Towards a theory of self-efficacy, self-regulation, and the development of a communities of inquiry in online and blended learning environments. *Computers and Education, 55*(4), 1721–1731.

Shea, P., & Bidjerano, T. (2012). Learning presence as a moderator in the community of inquiry model. *Computers and Education, 59*(2), 316–326.

Shea, P., Hayes, S., Smith, S. U., Vickers, J., Bidjerano, T., Gozza, M., & Tseng, C. (2013). Online learner self-regulation: Learning presence viewed through quantitative content and social network analysis. *The International Review of Research in Open and Distance Learning, 14*(3), 427–461.

Short, J. A., Williams, E., & Christie, B. (1976). *The social psychology of telecommunications.* London: Wiley.

Smith, J. G., & Suzuki, S. (2015). Embedded blended learning within an Algebra classroom: A multimedia capture experiment. *Journal of Computer Assisted Learning, 31*(2), 133–147.

Spence. D. (1984). *Narrative truth and historical truth: Meaning and interpretation in psychoanalysis*. New York, NY: W.W. Norton and Company.

Staker, H. (2011). *The rise of K-12 digital learning: Profiles of emerging models*. [White paper]. Mountain View, CA: Clayton Christensen Institute. Retrieved from http://www.christenseninstitute.org/wp-content/uploads/2013/04/The-rise-of-K-12-blended-learning.emerging-models.pdf

Swan, K., & Shih, L. F. (2005). On the nature and development of social presence in online course discussions. *Journal of Asynchronous Learning Networks, 9*(3), 115–136.

Ukrainetz, T. A., & Gillam, R. B. (2009). The expressive elaboration of imaginative narratives by children with specific language impairment. *Journal of Speech, Language, and Hearing Research, 52(*August), 883–899. http://doi.org/10.1044/1092-4388(2009/07-0133)

Xu, S., & Connelly, M. (2010). Narrative inquiry for school-based research. *Narrative Inquiry, 20*(2), 349-370.

Zimmerman, B. J. (2000). Self-efficacy: An essential motive to learn. *Contemporary Educational Psychology, 25*(1), 82–91.