



Building Trust and Recreating Community in Online Classrooms through Cultural Responsivity

Benjamin Boison^{1,2} & Anne Burke¹

¹ Faculty of Education, Memorial University of Newfoundland, NL, Canada

² Developmental Studies, Aurora College, NT, Canada

Correspondence: Benjamin Boison, Memorial University of Newfoundland, NL, Canada

Email: btkboison@mun.ca; amburke@mun.ca

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Abstract

This paper investigates how five elementary school teachers established trust and recreated community for their online learners via cultural responsivity during the COVID-19 lockdowns in St. John's, NL. The study adopts the Cultural Historical Activity Theory as a theoretical lens for this qualitative case study. The elementary school teachers in this sub-study are part of the Canadian section of the larger ADVOST project that promotes young children's inclusion and agency via culturally relevant arts and digital media. The research findings from analyzed interviews show that the elementary school teachers successfully fostered trust and emotional connections with their online students by creating inclusive, culturally responsive environments that foster collaboration, communication, and family involvement. Consequently, the researchers recommend adopting culturally responsive pedagogical practices and undertaking professional training on Equity, Diversity and Inclusion (EDI) with provisions for building trust and connection among online learners.

Keywords: Trust, Cultural Responsivity, Cultural Historical Activity Theory, Online Learning Community

Introduction

Online learning allows learners to participate and engage in activities supporting their learning. However, online learning could be isolating (van Heerden, 2023), where learners need to have salient connections that foster enough trust within the learning environment (Sutcliffe & Noble, 2022). When learners make connections in their learning environments, their engagement is heightened because they feel more motivated and comfortable (Sutcliffe & Noble, 2022). Many researchers (Cranston, 2011) argue that establishing connections between learners and members of the learning community is

grounded in the concept of trust. In this regard, teachers need to foster trust within the virtual learning environment so that the learners feel safe enough to open up for connection-building.

Researchers and experts emphasize the essence of establishing trust within the learning environment right from the beginning through inclusive pedagogical strategies (Bruney, 2012). Specifically, teachers can foster inclusivity by being culturally responsive when they recognize, respect, and appreciate a learner's diverse background. In so doing, teachers establish trust, and the students get a sense of belonging in a welcoming and inclusive virtual learning environment. Nonetheless, these pedagogical strategies are resource-intensive and time-consuming in planning and implementing (Naimi-Akbar, 2022). During the recent COVID-19 lockdowns from 2020 to 2022, the switch to remote and online learning was swift, without sufficient time and resources to plan pedagogical strategies to build trust and foster connections. Nonetheless, five elementary teachers within St. John's, NL, adopted inclusive pedagogical strategies, despite obvious limitations, to support their students' learning.

In this article, we explore how five elementary teachers used inclusive pedagogical strategies to build trust and connections with their online learners during the COVID-19 lockdowns. In the upcoming sections, we discuss the background of the study, discuss the literature review and iterate our methodology before discussing our findings. Next is the background to our study.

Background to the Study

This study forms a subset of the main Socially Innovative Interventions to Foster and to Advance Young Children's Inclusion (ADVOST) study, which implements the principles for promoting and amplifying the voices of young children in specific situations. These principles include child-centeredness, empowerment, accessibility, inclusivity, accountability, safeguarding, and confidentiality -- which facilitates environments where young children's voices are heard and respected, and they are empowered to influence their educational and social experiences. To achieve the tenets of the main study, it required close collaboration with professionals who work with Indigenous children in Finland, marginalized and immigrant children in Canada, and children from various ethnic and cultural backgrounds in the UK. As part of the Canadian study, the researchers initially explored art-based and culturally responsive teaching strategies for online students in Newfoundland and Labrador.

Our study complements the commitment of the main ADVOST project to address the unique challenges through increasingly multicultural inroads into the environment of education. The main study revealed various strategies, such as digital storytelling and other art-based activities, through which children express themselves, especially considering the

growing need for inclusive and culturally responsive pedagogy. The Canadian subset aims to link these approaches together to instill not just a sense of belonging among students, but to empower teachers in building online classrooms that bridge cultural barriers and inspire both trust and participation. In this paper, we specifically focus on how five teachers from the main study built trust and established connections to re-create community within their online classroom.

Literature Review

Impact of COVID-19 on Education

The closure of schools around the world (including Canada, where the ADVOST project was implemented) in their response to the COVID-19-induced lockdowns highlighted specific challenges and insights from the quick shift from traditional classroom instruction to online learning (Kapasias et al., 2020). During those lockdowns, online education became the preferred route for teaching and learning compared to traditional classroom instruction (Adnan & Anwar, 2020). On the other hand, online learning is comparable to traditional learning and still preferable to doing nothing, per Cook's (2009) meta-analysis on online education.

As always, educational institutions adhered to government authorities and the school boards' standards and suggestions to enhance the online learning experience while encouraging students to continue learning remotely during the lockdowns with all their uncertainties (Aucejo et al., 2020). Researchers devised several recommendations for managing online teaching and learning during such pandemic periods. For instance, Bao (2020) suggests five critical rules for effectively managing online learning, while Hasan and Bao (2020) recommend multi-age learning since students of all ages have been impacted by this large-scale, rapid change (Hasan & Bao, 2020). In this study, we also add to the ongoing discourse by exploring the strategies teachers use to address inclusivity concerns that will later foster trust and recreate a sense of community in those virtual learning spaces.

Students' education, social lives, and mental health were predicted to be significantly impacted by the pandemic's rapidly spreading rate, travel restrictions, and the closing of educational institutions across nations (Odrizola-Gonzalez et al., 2020). The pandemic's impact was far-reaching, with families being affected differently. According to Collier and Burke (2021), families were exposed to multiple challenges, which include limited access to digital resources and managing time between working and supporting children's education. Aucejo et al. (2020) suggest that while communities, schools and families were variably affected by the pandemic, the under-resourced were substantively impacted. To this point, limited resources, restricted access to digital resources, and Internet connectivity affected students' ability to achieve successful learning outcomes

(Cao et al., 2020). Throughout these happenings, teachers had to ensure that they provided inclusive instruction for students from diverse socio-economic backgrounds and those from culturally diverse backgrounds. Thus, our research study in Canada explores specific culturally responsive pedagogical strategies that elementary teachers employ while teaching their students online. In the subsequent sections of our literature review, we discuss EDI within the context of Canadian elementary schools. Nest the literature review

Equity, Diversity, and Inclusion (EDI) in Canadian Elementary Schools

According to Ikebuchi (2023), equity, diversity, and inclusion (EDI) principles are increasingly central to the Canadian education system, especially as institutions shift toward online and hybrid learning models. However, without a conscious focus on EDI, these models risk exacerbating existing inequalities by failing to address barriers like limited access to technology and inadequate support for diverse learners (Ikebuchi, 2023). Over the past few decades, educators and school administrators have come to appreciate the essence of implementing EDI principles due to the need to meet learner needs and uniqueness. Currently, education in Newfoundland and Labrador's elementary schools is focused on creating inclusive learning environments that respect diversity -- so that every child can receive quality education in any part of the province, regardless of their diverse backgrounds and cultures (Department of Education, NL (n.d.). Elementary school teachers adapt pedagogical strategies based on educational policies, professional development, and teacher educational programs. Strategies, such as cultural responsiveness, become necessary so that every child can learn and feel comfortable in the classroom (Gay, 2018).

The Relevance of Trust in Education

Tschannen-Moran and Hoy (2000) have described trust as the 'willingness of one party to make [their] self-vulnerable to another party based on the belief that the other party is predictable, has good intentions, is competent, honest, and communicates openly' (p. 556). Rotter (1967) offered another view of trust that defines it as a generalized expectancy on which others' words or statements may depend. Hai-Jew (2007) described trust as an invisible "social glue" that enables strangers to coalesce and cooperate in an online distance-learning course. Trust is generally the willingness to expect positive outcomes from a person; virtual team trust is more difficult to define than face-to-face trust. According to Baturay and Toker (2019), virtual team trust is defined as "the overall willingness of virtual team members to rely on one another that results from the aggregate of potential trust dimensions achieved through socio-emotional and task processes and supported by technological capabilities" (cited Mitchell & Zigurs, 2009, p. 72). Thus, in

online learning, trust is students' perception regarding their learning environment and participants and their ability to fulfill educational expectations.

The virtual classroom is mediated via the technological platforms. This removes the face-to-face environment, allowing more personal communication among teams (Hai-Jew, 2007). Virtual classrooms are increasingly gaining attention because most people, including students, prefer online courses to attend onsite classes (Mitchell & Zigurs, 2009). Trust in online classes is a prerequisite for a low-risk exchange among students, flexible disclosure of relevant information, and building solid relationships. Trust is one of the most prominent factors for successful virtual collaboration (Leroy et al., 2017), and it is suggested in the literature that the effect of socio-emotional processes such as trust should be examined in a collaborative learning environment (Isohätälä et al., 2017).

In a study by Hai-Jew (2007), the researcher explored the trust factor in online classrooms. Hai-Jew (2007) examined the views of 654 students from Washington and found that 80% of the participants noted high trust in online classrooms, while 20% answered that there is low trust in online classrooms. Hai-Jew (2007) also found that high trust is based on the instructor being trustworthy, understanding, ethical, and knowledgeable. Low trust is largely attributed to unethical practices, misconduct and a lack of knowledge. Hai-Jew (2007) revealed that most students in online learning environments did not get a sense of trust building in their online learning experiences. Despite the established benefits of building trust and community in traditional classrooms and the potential for transferring these into online spaces, there is an opportunity to explore how elementary teachers addressed these during the pandemic's lockdown periods.

In another study, Baturay and Toker (2019) compared face-to-face classroom and virtual classroom trust. The researchers found that online trust is low at the beginning of the course but increases significantly at the end, while trust in face-to-face classrooms starts high and reduces at the end of the course. Baturay and Toker (2019) admitted that trust in online classrooms is possible, but building trust in online platforms requires time. The process of building trust and the factors to consider in building online trust are limited, hence the need for the present study.

Lockman & Schirmer (2020) explored the effectiveness of online classrooms, demonstrating strategies that are similar to face-to-face learning. There are some additional considerations, including curriculum planning and design to learning and assessment management. They identified five key factors that contribute to effective online learning environments: The second performance measure (which Diaz and Heard, 2013, defined as 'Generic' measures of performance) includes cognitive load (Wickens, 2013), media richness (Woldeab et al., 2020), multimedia learning (Fiorella et al., 2020), interactivity (Lockman & Schirmer, 2020), and group cohesion and trust (Dixson et al., 2017). Multiple meta-analyses and research studies show that a highly trusted learning environment is important when building a community (Breuer et al., 2016; De Jong et al., 2016).

Dixson et al. (2017) defined 'social cohesion' as a construct referring to emotional bonds of friendship, caring, and closeness among group members, as well as enjoyment of each other's company. These attributes are as relevant in the online setting, where they strongly predict student collaboration and learning, as in the face-to-face setting (Lockman & Schirmer, 2020), in a recent meta-analysis of 104 studies. The Group argues that to facilitate learning between participants, trust and social cohesion amongst learners must be developed by facilitators, especially in low history and no face time environments where participants have no shared history or have never met. The central focus of this present study is on building trust from two differing standpoints: that of students and instructors. Conclusively, when trust is built in a learning environment, it is beneficial for the learners, and it can enable students to open up to issues bothering them so they can seek support where appropriate. Furthermore, Battery (2003) indicated that trust in education positively impacts the overall morale values of teaching professionals, giving insight into the appropriate and efficient administration of educational settings. Battery (2003) argues that in addition to being advantageous for the educational sector, trust may also be a necessary and growing component of the partnership between educators and governments.

In this paper, we show the importance of building trust in elementary schools since it directly affects the learners' participation, learning and academic achievement. The more the students feel they can trust their teachers and the environment they are in, the more they are willing to take a chance, ask questions, and invest more time and effort into their studies (Garrison et al., 2000). Building trust also promotes safety and inclusion – which is crucial for learners, especially in online classes during the COVID-19 pandemic since learners cannot meet physically. Thus, it is evident that building trust can reduce the sense of loneliness, foster a relaxed learning environment, and promote learner participation and engagement that lead to better learning outcomes. Building trust is core in relationship building, but it is even more critical when building strong relationships leading to meaningful connections in virtual classrooms.

Creating Relationships in Virtual Classes Social Presence and Interaction

Social presence, a critical conceptual factor in online learning, is the extent of the participants' perceived interpersonal relationship. It includes the students and the instructors' ability to portray themselves socially and emotionally, thus giving online communication a more personal touch. "Social presence is defined as the ability of participants in a community to protect themselves, socially and emotionally, as real people through a medium of communication" (Garrison et al., 2003, p.167). Meeting students face-to-face for instructional activities is quite different from having an online community. However, much effort can be put into translating the ideas online and engaging students in

the instructor's presence to make it easier to increase their participation level as if it were face-to-face. The instruction should be so that the interaction between student to student and teacher to student will be well appreciated, as well as the students and the contents being delivered. Gunawardena (1995) posited that the kind of interactions that take place in an online community and the sense of community created in the course of the instruction lie on the shoulders of the instructor to create a conducive atmosphere to promote the desirable interaction. According to their research, Richardson et al. (2017) confirmed that social presence is crucial in improving students' sense of belonging and participation in virtual learning environments (Lowenthal & Dunlap, 2020; Martin et al., 2022).

Teachers can use pedagogical strategies to foster social presence through video conferencing for real-time meetings, online discussion forums, and group activities. Synchronous video meetings include live lectures and virtual office hours where communication is live, and students can get an immediate response (Lowenthal, 2022; Redmond et al., 2018). Online discussion forums help to support communication in ways that do not follow the traditional real-time conversation, giving students opportunities to post their messages and contemplate others' messages (Garrison & Cleveland-Innes, 2005; Molinillo et al., 2018). These pedagogical strategies assist in developing a sense of belonging and foster enthusiasm for active learning among the learners (Darby & Lang, 2019; Lang, 2019; Swan et al., 2009). In addition to the pedagogical strategies discussed in this section, one other salient contributory factor to creating relationships is purposefully fostering a sense of community in the virtual classroom setting.

Online Community Building

Developing a sense of community in a virtual classroom is crucial for making the learners feel welcome, appreciated, and, most importantly, connected. To this point, recreating a community online essentially entails nurturing an environment that makes the students feel that they are part of a learning group – regardless of the remoteness of online learning. The perceived sense of community in online learning enhances the students' satisfaction, retention and academic performance (Garrison & Akyol, 2013; Rovai, 2002; Shea et al., 2010).

Teachers and other stakeholders can create a sense of community in their online classes by encouraging teaching and learning processes that foster interconnections, for instance, by designing a curriculum incorporating group projects, peer assessments, and social interactions. Specifically, group activities enable the students to work on common assignments with their fellow students, thus encouraging togetherness (Swan et al., 2009). The processes involved in peer review help students to share ideas and get constructive comments from their peers, taking into account the aspect of group learning (Lowenthal & Dunlap, 2020). The social interaction offered through virtual study groups, casual chats,

and other online social events assists students in creating friendship bonds (Martin et al., 2022).

Also, interaction and communication are indispensable conditions for the existence of a learning community. There are several ways that instructors can help in this regard: ensuring that information is regularly updated, encouraging group discussions and ensuring that the student's questions and concerns are addressed (Garrison, 2017; Martin & Bolliger, 2018). Again, generating a positive environment in which different opinions are respected can contribute to the development of the community (Cui et al., 2020). Thus, the described strategies can be used to foster a solid and coherent virtual classroom community that will positively affect the student's academic achievement and emotional states. In order to build on the insights that we have discussed in the literature review, it is prudent to articulate the theoretical lens through which we perceive our inquiry. In the next section, we share our theoretical framework, the Cultural Historical Activity Theory (CHAT), which guides our inquiry, analysis, and discussion of research findings.

Theoretical Framework

Cultural Historical Activity Theory (CHAT) is a conventional practice-based framework that is used in analyzing professional work practices (Foot, 2014). CHAT provides a multi-dimensional analysis for professional practitioners to engage and participate in reflective research. Kirsten (2014) argues that a myriad of historically grounded, culturally- and legally-negotiated norms exist within the three foundational factors of CHAT. The first idea is that humans act by doing and engage in actions as ways of communication. The second idea is to employ tools and to communicate ideas. The third idea is making and interpreting meaning from all forms of learning, communicating, and acting (Vygotsky, 1978). The CHAT model is an activity system constantly evolving through collective learning actions in response to systemic contradictions, enabling multi-faceted analyses of the complex practices of professional work (Engeström, 2014). The essential task of CHAT analysis is to grasp the systemic whole of an activity, not just its separate components. This makes possible the analysis of a multitude of relations within an activity system, both at a particular point in time and as it evolves over time.

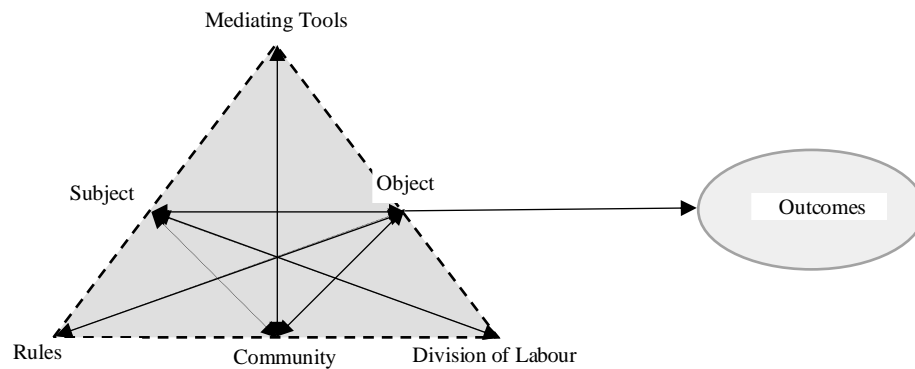


Figure 1: CHAT framework

CHAT can help explain the development and sustenance of trust and community-building in educational settings, especially in online learning. CHAT also focuses on the role of social and cultural contexts in understanding learning processes and interactions (Engeström, 2001). CHAT holds that learning takes place through the ongoing processes of individuals' engagements with their environment, with the help of cultural tools and practices. CHAT further illustrates how different components of the activity system (the subject, object, community, rules, tools, and division of labour) are related and how they work in synergy to achieve the intended purpose of the activity (Engeström, 1987). This way, it is possible to consider the overall process of building and maintaining trust (and community building) in the context of online learning environments.

The Third Generation of CHAT

Thus, in the case of using CHAT to analyze online learning, trust can be viewed as a result of successful mediation within the activity system. For example, collaborative tools and interactive platforms will help students communicate and collaborate in a classroom, thus building trust. Also, culturally responsive teaching practices and inclusive pedagogy may foster trust since all the students are accorded equal respect. Thus, by analyzing the interactions and interrelationships within the activity system, educators can determine the factors that hinder trust and develop ways of overcoming them to improve the learning process. CHAT, therefore, offers a valuable set of tools for understanding how trust and connection work in online education contexts, especially stressing the relevance of a supportive and culturally sensitive learning environment.

The third generation of CHAT focuses on the complex interplay among

individuals, tools, and communities in sociocultural contexts. In other words, it seeks to explain human activity with reference to collective experiences, historical development, and internal contradictions of a human-related activity (Engeström, 2001). Therefore, this approach is very relevant for analyzing online learning environments within which different elements (like digital platforms representing virtual classrooms or virtual learning communities) interact to create an activity system.

In applying CHAT to this study, the framework aptly serves as a robust lens through which we can perceive online learning processes, challenges and opportunities. According to the CHAT framework, there is more emphasis on contradictions (the tensions of the different elements within the activity system), which reveals some challenges in transferring traditional, face-to-face learning practices to an online format. For example, the absence of physical cues may inhibit the development of trust, just as the lack of a shared physical space makes developing a sense of community more challenging.

The concept of knotworking stands out, especially in the third generation of CHAT, and allows vast connections to online learning environments. In this vein, knotworking is a dynamic, often ad hoc collaboration where the participants come together without clearly defined roles to solve problems and create shared understanding. In this respect, the interactions between students, school staff, and technology during online classroom activities often take the form of knotworking, with relationships and roles much more fluid than in traditional learning settings. It was learned that this flexibility can challenge or enable the development of trust and community, depending on how the virtual space supports such a dynamic collaboration process.

Second, CHAT's concept of boundary crossing refers to how individuals or groups travel in and between activity systems. Boundary crossing in the context of this study references how these intra- and inter-movements are applied to online learning environments, as Akkerman and Bakker (2011) demonstrate. Thus, online classrooms involve boundary crossing between personal and academic locations across different digital ecologies and through different social spheres. Such crossings can open possibilities for learning and community building, but they can also create tensions or contradictions, which teachers somehow must find a way to manage. By studying such contradictions and bringing in concepts such as knotworking and boundary crossing, CHAT can provide information on how teachers can develop better approaches to engendering trust and community in virtual learning spaces. According to Bligh & Flood (2017), the third generation of CHAT, therefore, frames not only the challenges of education (which can include online education) but also brings in a theoretical pathway leading to the development of an understanding of how learning environments could evolve toward better fulfillment of social and educational needs.

Methodology

The study adopts a case study approach since it allows the researchers to investigate an individual, event, or situation of interest (Wimmer & Dominick, 2011) – in this context, how teachers built trust and community for their online learners within an elementary school. In our study, we were interested in how teachers evolved an environment of trust for young learners in an online class as a result of the Pandemic and why the measures taken were successful. Our study answers the research question, “How did five elementary school teachers foster trust and recreate a sense of community virtually for diverse online learners?”

In designing our case study, we considered Merriam and Tisdell’s (2016) three essential elements of case study research: the particular situation, the specific event, and the individuals involved. Thus, in the present study, we were interested in a particular context, namely, the use of culturally responsive teaching by five elementary school teachers in St. John’s, NL. This happened at a critical time, in the wake of the COVID-19 pandemic crisis that led to the closure of schools in Canada and NL. To this point, we were focused on how these teachers built trust and reestablished the class community under these challenging circumstances for online learners.

Merriam and Tisdell (2016) opine that the single most defining characteristic of case study research lies in delimiting the object of study, referred to as the case. Second, a case study requires a detailed description of the topic under study. As such, the case in this present study refers to the inclusive pedagogical approaches that these five teachers in an elementary school in St. John’s, NL, adopted in their efforts to build trust and recreate a sense of community virtually for their online learners. In light of a case study being descriptive, Merriam and Tisdell (2016) defined a case study as an in-depth description and analysis of a bounded system. Relatedly, our study involves in-depth descriptions of teachers’ experiences fostering cultural responsiveness for online learners. Importantly, Merriam and Tisdell (2016) asserted that a case study should be heuristic, which means that a case study, such as this present study, provides a deeper understanding and offers newer insights, perspectives, meanings, and interpretations on building trust, establishing connections, and recreating community online.

The researchers sought ethical clearance from the requisite educational and administrative bodies to ensure adherence to accepted ethical standards that the study was conducted while upholding values of integrity, honesty, and fairness.

Once ethically cleared, the researchers proceeded to gather the data from a purposive sample. Purposive sampling is a selection of events, entities, or data based on predetermined features of interest to the researchers (Wimmer & Dominick, 2011). Thus, the researchers purposively selected teachers from three St. John’s, NL schools who participated in the larger ADVOST project. The selection criteria of participants included

teaching culturally diverse younger students online and implementing cultural responsiveness measures. The researchers collected data through individual interviews with the participants.

After collecting and transcribing the interview data, the researchers adopted a document analysis for analyzing the collected interview data with the support of the CHAT framework. The document analysis approach is a well-known research data-gathering method that carefully examines documents or other artifacts to draw out important information (Bowen, 2009). These documents (interview data in our case) indicate the teachers' values, practices, and circumstances, which helped answer this study's research questions.

Research Findings and Discussion

The emergent themes from the analyzed interview data revealed how teachers built trust and made personable, healthy connections among their young learners virtually. These findings highlight specific successes and strategies since the pandemic-induced remote learning added another layer of complexity for teachers with regard to limited resources, ongoing global and local events, and limited technology accessibility.

Creating a Supportive and Inclusive Learning Environment

One of the most prominent themes emerging from the data had to do with how to create a safe and inclusive learning environment. Avery stated, "You need to build that safe, welcoming environment before any learning is going to happen" (Avery, personal communication, 2023). Third-generation CHAT supports the concept of multi-voiced activity systems in which the learner, teacher, and cultural context dynamically interact to co-create a space of learning and trust. The environment is not only created by the teacher but also by the relationships, rules, and tools. According to studies like Addy et al. (2023), creating inclusion in the classroom is vital for school officials to build trust and engagement in diverse classrooms; students should feel that their voices and humanity are heard and respected.

Jordan echoed these sentiments, noting, "I found that taking time to really think about my learners and who they were and what environment they were learning in... really considering that when I was planning my activities was very important" (Jordan, personal communication, 2023). Similarly, in reflecting CHAT's attention to contradictions and boundary crossing, Jordan's practice demonstrates how teachers deal with boundary crossing between the home and virtual classroom, utilizing culturally responsive strategies to cross the space between the two. Hargreaves and Fullan (2020) find that research supports the idea that we develop more responsive and trusting learning environments

when we attend to student context.

Taylor emphasized maintaining classroom commitments: "So, we decided to prioritize reviewing our classroom commitments... Before we could deliver the curriculum, everybody needed to feel comfortable" (Taylor, personal communication, 2023). This captures CHAT's division of labour in an activity system, whereby meaningful learning results from collaboration between students, teachers, and, in some cases, families. Without clear expectations, the community cannot work together and will not be a safe and inclusive learning place (Norman, 2020).

Encouraging Collaboration and Collective Learning

Collaboration was another critical theme in creating a sense of community in virtual classrooms. Avery noted, "In small groups, they shared a lot more than in the whole group" (Avery, personal communication, 2023). In line with third-generation CHAT, this observation corresponds with the dynamic, flexible mode of collaboration among participants called knotworking, which is crucial for problem-solving and learning. Virtual settings provide small group formats that support more intimate and focused interactions in which students are active learning community members. Gillies's (2023) research demonstrates that cooperative learning in small groups enhances both academic and social-emotional growth in distributed online learning.

Riley emphasized family involvement by stating, "Because they were sitting there with the family, bring in the family as well." We were like, come join on the learning journey and help us pick up as we can all pick up together" (Riley, personal communication, 2023). This echoes boundary crossing as an idea of CHAT because the family members are involved in the activity system and navigate through the boundary—even the boundary between school and home. As Epstein (2018) points out, family engagement fosters a sense of belonging and enhanced academic performance, especially in virtual environments where home and school merge.

Taylor reflected on the importance of small group interactions: "For students who were a little bit more reserved... we had the individual or small group sessions to make them more comfortable" (Taylor, personal communication, 2023). Here again, there is evidence of multi-voicing in CHAT: the smaller group settings keep diverse voices on the table and ensure that quieter students can meaningfully contribute to the discussion. For example, research by Amerstorfer (2021) highlights that creating inclusive virtual spaces, where diverse perspectives are respected, significantly boosts student engagement and fosters a more active learning environment. Additionally, Stelitano et al. (2020) discuss how equitable access and inclusivity in online classrooms contribute to creating a sense of belonging, which, in turn, makes these spaces more engaging for students.

Prioritizing Clear, Open, and Frequent Communication

Building trust through communication emerged as a critical strategy, with teachers highlighting the need for regular check-ins and clear communication. Jordan shared, "I had to ensure that everybody was engaged and then call them—following up with families to make sure it was a good time for them and find out what we could do to support them" (Jordan, personal communication, 2023). In CHAT, tools and artifacts, such as communication methods (e.g., phone calls, email, and virtual meetings), are also mediating artefacts in the activity system. Implementing these tools effectively ensures that there is limited interruption of communication, which later leads to the reduction of misunderstandings and the maintenance of engagement between students and families in education (Foot, 2014).

Chris highlighted the role of accessible communication tools: "I had to create so many videos for how to log in and go step by step... We were translating some of our documents for parents because we were sending out info on how to pick up their Chromebooks" (Chris, personal communication, 2023). This is part of CHAT's idea of mediation, in which teachers use technological tools to mediate the division (mediation) between different communities (students, parents, and educators). Multimedia and multilingual communication strategies improve engagement with diversity by overcoming barriers, says Galla et al. (2023).

Avery's emphasis on regular communication was vital: "It was a lot of oral communication... regular small group and one-on-one check-ins to hear their voice" (Avery, personal communication, 2023). CHAT's check-ins function as nodes of interaction with CHAT, maintaining a dialogue between participants, building trust and solving problems. According to Mahdi (2023), trust is created, and frequent and individualized communication increases student engagement in online learning environments.

Recognizing and Celebrating Cultural Diversity

One integral aspect of creating that trusting, inclusive virtual classroom was recognizing and celebrating cultural diversity. Riley mentioned, "We teach every year about all the different celebrations and traditions, but the most critical factor was that we were able to see it, experience it, and hear it online" (Riley, personal communication, 2023). CHAT recognizes the cultural-historical context in which learning occurs and relates to the input. Recognizing students' unique cultural backgrounds and including them in the virtual classroom makes teachers' identity and sense of belonging more visible and facilitates students' participation and trust in class (Ladson-Billings, 2021).

Taylor emphasized, "You need to get to know your students, not just on a surface

level. You need to know their history, who they are, and where they come from" (Taylor, personal communication, 2023). CHAT's framework, especially within the third-generation model, argues for learning settings that embrace the multiple cultural contexts of students. This is supported by Gay (2018), who states that cultural competence is essential for developing trust and creating an inclusive space.

Building Strong Emotional Ties

To build trust and engagement, strong emotional ties between teachers and students were imperative. Taylor described their approach: "I would have made a more concentrated effort to focus on direct social-emotional learning. We did feeling check-ins... focusing on keeping the connection" (Taylor, personal communication, 2023). In the CHAT, these emotional connections are mediated through social relationships in the activity system. The trust and involvement that come from developing strong teacher-student connections help learning go further. According to Jones and Kahn (2017), building trust and achieving academic success depend on social-emotional learning.

Riley highlighted the importance of emotional connections: "The key thing about culturally responsive classrooms is a connection between you and your students" (Riley, personal communication, 2023). This is supported by Hammond (2015), who holds that relationships based on emotional trust and cultural understanding are essential to engage students, especially in diverse classrooms where students' cultural backgrounds affect how they learn.

Integrating CHAT into Trust-Building and Community Formation

The emerging themes from the analyzed interview data show how teachers used their students' trust not only to recreate a community feeling but also to teach in a virtual environment while at the same time treating it as a temporary accommodation. Especially during the pandemic-mandated shift to remote learning, educators were left facing unique challenges: limited resources, ongoing disruptions, and technological barriers. Although the obstacles exist, there was some success in creating a virtual community that supported, engaged and included students.

Taking a Cultural Historical Activity Theory (CHAT) perspective, the activities of teachers, students, and families can be understood as a dynamic activity system that informs the design of these virtual classrooms. The subject was the mediated physical classroom; the object was trust-building and learning; and the tools were digital platforms, collaborative tasks and communication methods. As mediators, teachers adapted their methods to meet the changing needs of their students and families, and care and support with emotional and academic aspects of learning continued to remain central to the process.

Strategies to integrate are fostering inclusivity through creating personalized communication and implementing culturally responsive teaching, strategies that enable all students to participate. Of particular impact was integrating families into the learning process (a strong match with the centrality of community and division of labour in CHAT). Families became vital partners in the education of our students, helping to build up a collective effort to keep them engaged and emotionally supported. To assuage the pain of virtual school, however, this blurred line between academic and domestic realms brought naturally with it the destruction of both.

Rules of these virtual communities emphasizing respect, openness, and inclusion presented a shared framework to which students, parents, and teachers adhered. A lack of physical presence did not deter these norms from facilitating a consistent and trusting learning environment. Moreover, using tools such as digital platforms, multimedia resources, and structured group activities assisted in bridging the gap between distant learners, enabling the interaction and collaboration between each other akin to an in-person classroom.

As a result of this activity system, a robust and supportive learning community was ultimately produced despite the confines of online education. Trust-building practises, emotional support and acknowledgement of cultural diversity were implemented by teachers to recreate a safe, engaging and connected classroom environment. These learnings from this experience can be applied to other future online and hybrid education models, reinforcing the need to create community and engender trust, even when the space is digital.

Table 1: Emergent themes and CHAT factors in building trust and community in virtual classrooms

CHAT Factor	Creating a Supportive and Inclusive Learning Environment	Encouraging Collaboration and Collective Learning	Prioritizing Clear, Open, and Frequent Communication	Recognizing and Celebrating Cultures	Building Strong Emotional Ties
Subject	Educators focused on building inclusivity, trust, and student voice.	Students and educators collaborating to enhance learning.	Educators fostering clear communication between students, families, and the school.	Educators recognizing and celebrating the cultural diversity of their students.	Educators building emotional ties through empathy and SEL (social-emotional learning).
Object	Establish a safe, supportive, and	Foster collective	Create strong communication	Create an inclusive	Strengthen emotional

CHAT Factor	Creating a Supportive and Inclusive Learning Environment	Encouraging Collaboration and Collective Learning	Prioritizing Clear, Open, and Frequent Communication	Recognizing and Celebrating Cultures	Building Strong Emotional Ties
	inclusive environment for students.	learning to develop social and academic competencies.	channels for engagement and support.	environment that celebrates cultural diversity and reinforces identity.	bonds between teachers and students to foster trust and engagement.
Tools/ Artefacts	Group work, peer assessment, reflective practices, and technology.	Structured activities (group work, sharing circles), digital tools like wikis.	Communication tools (emails, videos, virtual check-ins), translated documents.	Visual aids, multilingual resources, culturally responsive teaching methods.	SEL techniques (check-ins, emotional calls), culturally responsive practices.
Community	Students, educators, and families, working together to create a cohesive, online learning space that replicates the physical classroom community.	Students, educators, and families collaborating for collective learning and fostering an online community.	Students, educators, and families staying connected through clear, frequent communication.	Students, educators, and families forming a virtual community that respects and celebrates cultural identity.	Students, educators, and families fostering emotional connections and building a strong sense of online belonging.
Rules	Norms emphasizing respect, safety, inclusivity, and diversity.	Norms promoting respectful collaboration and sharing within group work.	Openness, responsiveness, and clarity in communication are key norms.	Respect for cultural diversity and ensuring that it is reflected in learning activities.	Regular emotional support, trust-building, and culturally responsive engagement practices.
Division of Labour	Educators design inclusive practices,	Students collaborate in small groups;	Teachers provide communication and support;	Educators facilitate cultural	Teachers lead emotional check-ins;

CHAT Factor	Creating a Supportive and Inclusive Learning Environment	Encouraging Collaboration and Collective Learning	Prioritizing Clear, Open, and Frequent Communication	Recognizing and Celebrating Cultures	Building Strong Emotional Ties
	students actively engage, families support the learning process.	teachers facilitate, families contribute.	students and families provide feedback and concerns.	recognition; students and families contribute cultural experiences.	students and families share their emotional and cultural perspectives.
Outcome	A cohesive, inclusive learning community enhancing academic success and emotional well-being, both online and in-person.	Improved social-emotional skills and academic outcomes, preparing students for lifelong collaboration in virtual and physical spaces.	A trusting, supportive learning environment fosters increased engagement and participation through virtual platforms.	A welcoming and inclusive environment fostering cultural pride and academic success, creating a connected virtual classroom.	A supportive, empathetic online classroom that enhances student engagement and trust, reinforcing virtual community building.

CHAT Framework Applied to Virtual Classroom Community-Building

Figure 2 depicts the decomposed factors of cultural historical activity theory (CHAT) (third generation) subject, object, tools, community, rules, division of labour, and outcome, which were applied to foster trust and build community in virtual classrooms. As the primary facilitators, teachers used digital platforms and culturally responsive teaching approaches to establish a secure, inclusive learning environment. They included students and families in a shared responsibility for learning by creating clear norms around respect, communication, and collaboration. Families were playing an active role in the division of labour, supporting the students emotionally and academically, and teachers had strong, frequent, and good communication with the family. What emerged is a supportive virtual community that fostered students' interconnections, engagement and sense of pride with cultural identities, and that resulted in emotional and academic growth.

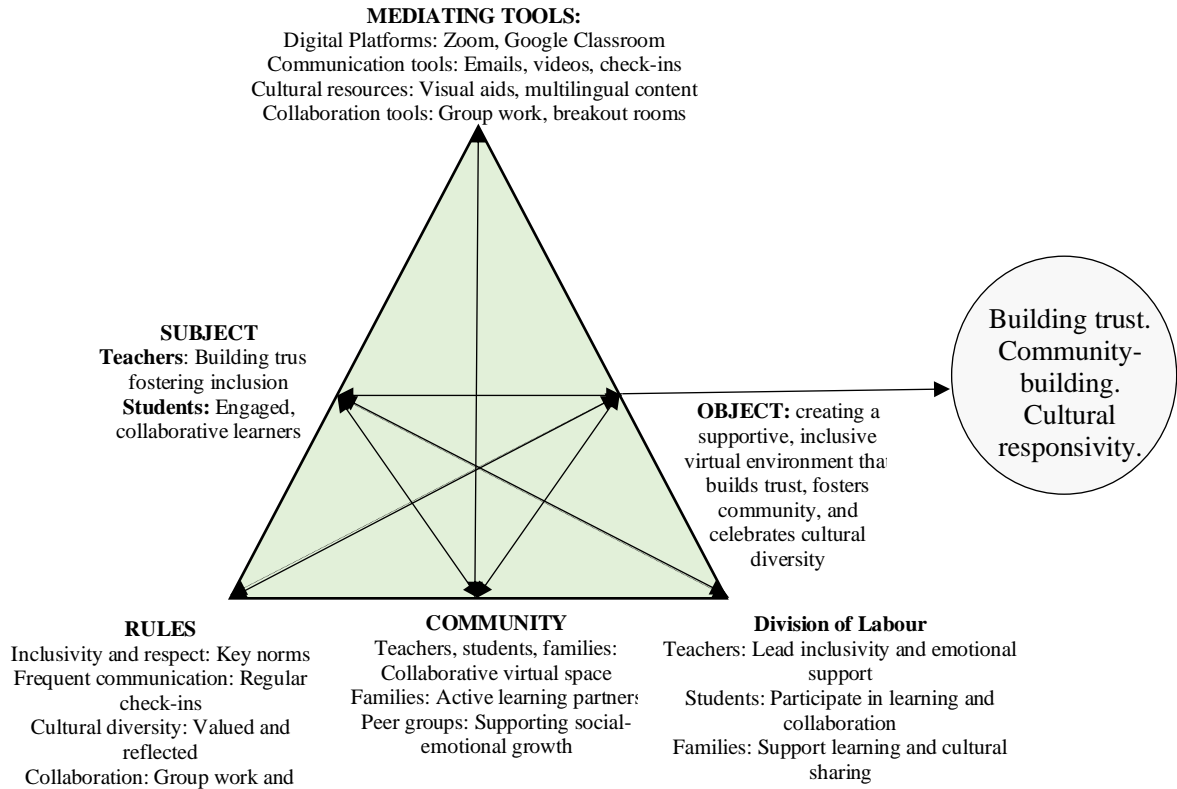


Figure 2: CHAT Framework in action: Trust-building and community formation in virtual classrooms

Conclusion

These results demonstrate how intentional trust-building within this online learning environment is essential for developing an inclusive and engaging space for learners. The switch to virtual classrooms during the COVID-19 pandemic proved to be an insurmountable task. However, the experiences of the elementary teachers in this study demonstrate that enhancing trust, working closely and fostering cultural responsiveness are foundational to addressing the barriers that so effectively hindered the transition to distance learning.

Avery and Jordan modelled how a relationship based on trust starts with knowing students individually and creating supportive and inclusive learning environments. According to the research by Addy et al. (2021); Epstein (2018), and García and Weiss (2019), inclusive pedagogy is proven to result in better student engagement and academic outcomes. Additionally, teachers such as Riley stressed the need for family involvement

and how collaboration is critical to the vital home-school connection and building a sense of community within the virtual space. Epstein's (2018) work, *Family is School Partnerships*, shows analogous results that it helps improve learning outcomes and fosters stronger emotional bonds with the classroom community.

Furthermore, cultural responsiveness was found to be very prominent in building trust. A teacher like Taylor or Riley, who took the time to understand and learn their students' cultural backgrounds and integrate them into their lessons, created a space where students felt seen and valued. Gay (2018) and Buurman, (2018) support this approach as essential to helping students feel a connection to one another in diverse classrooms. Within those rooms, we recognize and celebrate cultural diversity and find that it promotes academic success and helps to build trust and emotional connections between students and educators.

These findings have implications for a third generation of CHAT as they move the teacher to manage the contradictory nature of the virtual classroom—limited resources, physical separation, cultural diversity—by using technology and inclusive practices as instruments to construct trust and an inclusive community. CHAT helps highlight how teachers, students, and families collectively create new learning dynamics and build trust in an asynchronous, face-to-face environment.

Lastly, online learning environments thrive on culturally responsive intentional practices that make space for trust, emotional connection, and inclusivity. They are essential for educators and policymakers trying to incorporate the ongoing shift towards online and hybrid classes. As schools work on determining what remote learning looks like, professional development needs to move away from defining the work of teachers in stereotypical and own bubble terms and towards the skills and knowledge to develop trust, build community, and support diverse learners.

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