

Online Approaches for Family Engagement: TeleNGAGE

Younglong “Rachel” Kim
Oklahoma State University, USA
younglong.kim@okstate.edu

Kathy Curry
Oklahoma State University, USA
katherine.curry@okstate.edu

Ashlyn Fiegner
Oklahoma State University, USA
ashlyn.fiegner@okstate.edu

Family engagement has been an integral part of education across the United States over decades. Research has shown evident benefits of effective family engagement on grade improvement and learning performance. Family engagement has a positive effect on student motivation, student behavior, student attendance and student optimism towards schooling. During COVID, schools had to close their doors. During this time, TeleNGAGE still connected families to school with an online approach. TeleNGAGE is an online environment for engaging families for student education. While benefits have emerged, there has been no research yet to present successful online elements of TeleNGAGE. The purpose of this study is to explore, through the lens of self-determination theory (Ryan & Deci, 2017), how components of TeleNGAGE facilitated engagement of participants as they collaboratively addressed problems associated with the pandemic. Main components through the online approaches include using case-based scenarios and didactic sessions, discussion, and accessibility. Implications for practice and directions for further research are discussed.

Keywords: family engagement, online approach, TeleNGAGE

Introduction

Family engagement has been an integral part of education across the United States over decades (Weiss et al., 2010). Research has shown evident benefits of effective family engagement on grade improvement and learning performance (Henderson & Mapp, 2002; Gonzalez & Jackson, 2013). In addition, family engagement has a positive effect on student motivation, student behavior, student attendance and student optimism towards schooling (Cheung & Pomerantz, 2012; McConnell & Kubina, 2014; Oberg De La Garza & Moreno Kuri, 2014). Despite these benefits, some families may not be able to engage due to limitations or restrictions in their personal environments. For example, some families might not be able to be present for school events due to limited transportation or working multiple jobs for their basic needs at home (King & Goodwin, 2002; Smith & Sheridan, 2019). In addition, COVID-19 restrictions caused many schools to close their doors, leading to further limitations and hindrances for families to be involved with student learning.

Despite the limitations that some families may experience for engagement, the internet has served as a powerful tool for learning and connection (Snyder, 2009). School leaders and teachers quickly adapted to the pandemic by utilizing resources available on the internet. Concerning family engagement in schools, the online learning environment made it possible for connections among schools, teachers, and families. However, for a quality online learning environment, effective instructional design is required by considering engagement factors (Czerkowski & Lyman, 2016). Kira (2007) claims that successful online learning is designed to meet student learning needs and also enhances learner engagement. For example, successful instructional frameworks that Kira (2007) suggests for online learning environments contain developing learners' interaction strategies and selecting media and resources for learners. Similarly, Redmond et al. (2018) studied the successful elements for an online learning environment. They identified five key elements of online engagement, social, cognitive, behavior, collaborative, and emotional engagement. Specifically, social engagement involves creating a sense of belonging, building community and trust, so it is recommended that instructors offer those opportunities at an online learning environment to increase participants' engagement (Redmond et al., 2018; Wright et al., 2013). Their further suggestion is distribution of expertise from teachers to students. They claimed students' grades are closely related to emotional and intellectual efforts and resources students use in an online learning environment. Similarly, in online learning environments, learners themselves can be experts because of the different knowledge and perspectives they bring to the learning environment. For increasing behavior engagement as an

observable element of students being involved in learning, identifying opportunities and challenges matters in learning design. A study (Schubert, 2015) supports that when learners recognize their opportunity to solve real challenges in an online environment, their engagement is increased. In addition, learning from peers and developing professional networks are key factors that can facilitate students' collaborative engagement. In sum, designing online environments with intentional engagement elements could facilitate learners' engagement in their learning. While many schools closed their doors during COVID-19 (Harris et al., 2020), it was still possible to be connected with schools and families within an online learning approach. TeleNGAGE is an example of an online learning environment that actually enhanced family engagement in student education even during the pandemic.

TeleNGAGE

TeleNGAGE is one of seven education related ECHO lines that provides professional development across the state of Oklahoma. The purpose of TeleNGAGE is to connect families, schools, and community members in an online learning environment to support the educational success of students. TeleNGAGE fosters collaborative relationships among educators, families and community members through the "all teach; all learn" mantra of ECHO and provides a foundation for capacity building for families, schools, and communities as they work together to solve educational challenges. As in all ECHO lines, participants in TeleNGAGE consist of hub-team members and spoke sites. Hub-team members for TeleNGAGE included three educational leaders (two principals and one superintendent), two parents, a clinical psychologist, and two higher education faculty members. The spoke site members refer to all other participants who voluntarily participate in ECHO sessions. In TeleNGAGE, spoke site participants consisted of teachers, educational leaders from across the state, community members, parents, and a number of graduate students seeking district level licensure. Key components of each TeleNGAGE session include case-based scenarios (for collaborative problem solving), short didactic presentations, discussions, and accessibility through the online platform, Zoom.

During the pandemic, TeleNGAGE became a primary method of collaboration as stakeholders in districts across the state addressed the unprecedented challenges that emerged. In response to these challenges, TeleNGAGE hosted one-hour biweekly sessions online so that schools, families, and communities could collaboratively address these emerging problems. TeleNGAGE was easily accessible even though schools and districts were closed, and it provided an opportunity for educators and families to connect as they navigated new and unfamiliar challenges. Family members, educational leaders, and community members remained engaged despite the added stress of the pandemic. This engagement is noteworthy because sustained collaboration between families and schools is relatively rare (Rispoli et al., 2018), despite tremendous efforts of schools, historically, to engage families. Additionally, it is logical to expect that family engagement during the pandemic would diminish simply because of the added stress, disrupted routines, and enhanced responsibilities that the pandemic imposed. However, despite those factors, engagement of families, schools and community members remained consistent during school closures. Therefore, additional understandings are needed regarding how the components of TeleNGAGE facilitated participant motivation for continual engagement during this challenging time.

Purpose Statement & Research Questions

The purpose of the study, therefore, is to explore, through the lens of self-determination theory (Ryan & Deci, 2017), how components of TeleNGAGE facilitated engagement of participants as they collaboratively addressed problems associated with the pandemic. The research questions are as follows.

Overarching Question:

How did the key components of TeleNGAGE support participant engagement as they collaboratively addressed problems associated with the pandemic?

1. How did case-based scenarios support participants' motivation for continued engagement?
2. How did the didactic component of TeleNGAGE support participants' motivation for continued engagement?
3. How did TeleNGAGE discussions support participants' motivation for continued engagement?
4. How did the accessibility of TeleNGAGE support participants' motivation for continued engagement?

Key Components of TeleNGAGE Explained

Case-Based Scenarios

During each TeleNGAGE session, participants engaged in anonymous, case-based scenarios that addressed challenges that are commonly experienced across districts. During this portion of the TeleNGAGE session, a Hub Team member presented an anonymous case and facilitated collaborative problem solving among all participants. Although the use of case-based learning is quite common among medical students as they learn to recognize problems and to solve them collaboratively (Williams, 2005), case-based learning has been less evident in capacity building of educators. Education related ECHO lines, however, have adopted this form of learning to create an engaging learning environment to enhance the capacity of all participants (Ward, 1998). Schubert (2015) stresses that case-based learning can be quite effective in a variety of disciplines as learners actively engage in complex problem solving. Further, Clark (2012) suggests using scenarios is appropriate for practitioners as it facilitates learners to explore problem-solving and to apply the knowledge that learners acquired. Similarly, Hempel et al. (2016) shows that students learn much better when they use the case-based approach compared to the lecture-based approach. In sum, many scholars identify benefits of using case-based approaches in online learning environments (Hempel et al., 2016; Schubert, 2015; Ward, 1998; Williams, 2005).

Didactic Sessions

Each TeleNGAGE session includes a brief (ten to fifteen minute) didactic presentation. A Hub Team Member typically presents the didactic, and the topics addressed often align with challenges involved in case-based scenarios. These theory-to-practice presentations facilitate learning among participants regarding a topic that has relevance for all participants (Harris et al., 2020). The intent of the didactic presentation is for participants to learn from theory and then practice what they learn in their personal or professional lives. At the end of didactic sessions as well as case-shared sessions, the facilitator of the session often leads participants in a discussion to share new insights and learning.

Discussions

All TeleNGAGE sessions contain discussion to encourage the engagement of all participants as they interact with other participants. Discussions are facilitated by a Hub Team member for the purpose of creating space where every participant can share their opinions, experiences, or challenges related to the learning objectives. Because participants bring their own experience and expertise to each ECHO session, participants learn from each other as they dialogue and share insights.

Accessibility

TeleNGAGE is an online learning environment that is easily accessible to all participants, including parents or educators in remote areas. Meetings of TeleNGAGE are planned at a time that is convenient for most participants. Typically, the one-hour sessions occur during the lunch hour when many participants can join remotely from wherever they are located. Scheduling sessions for only one hour at a mutually convenient time and providing remote access through zoom technology is meant to encourage voluntary participation and to encourage sustained involvement. Additionally, all didactic presentations and case notes are uploaded to the TeleNGAGE website for easy access after each session.

Theoretical Framework

This study uses Self-Determination Theory (SDT) as a lens to explain the findings. SDT is a motivational theory that emphasizes three main psychological needs – autonomy, competence, and relatedness (Ryan & Deci, 2017) for goal attainment. According to SDT, participant engagement and motivation in a learning environment is contingent upon the extent to which the environment supports these three basic needs. Competence is learners' own belief in their ability to accomplish the task at hand. Bandura (1989) and Deci and Ryan (2017) claimed that competence matters in order to increase learner motivation in learning. Autonomy refers to one's perception that he/she has at least some control over their own learning. SDT explains learners' need to experience volition in their decisions and to find meaning and relevance in what they are learning. The last element in SDT, relatedness, is learners' need to feel a sense of connection, belonging, and value congruence with teachers, peers, or learning content. SDT explains that, when learners feel cared for or when they feel connected to others in their learning environment, they are motivated to press forward in learning, even when challenges arise. In sum, learners are likely to engage deeply in a learning setting that supports their needs for autonomy, competence, and relatedness; this autonomously motivated engagement optimizes participant learning.

Methods and Data Sources

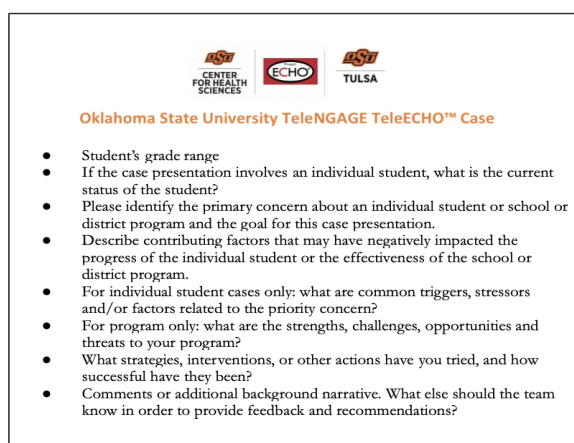
To answer the research questions, this study utilizes a qualitative case study design guided by Merriam (2009). According to Merriam (2009), a case study investigates a subject in the natural setting by generating descriptions with deep understanding of the subject. Data collected for this study include interviews, observations, and documents such as the TeleNGAGE website, case submission forms for presented cases, copies of PowerPoint presentations for didactic presentations, and field notes taken during TeleNGAGE zoom meetings. Field notes were taken during three of the four key components of TeleNGAGE: case-based scenarios, didactic sessions, and discussions. Data regarding accessibility were gathered during interviews, observations of attendance at TeleNGAGE meetings, and data regarding the usage of the TeleNGAGE webpage by participants following TeleNGAGE meetings. Findings are reported in the following section.

Findings

Case-Based Scenarios

The use of case-based scenarios seemed to support participants' psychological needs for autonomy and competence. Because the cases focused on situations that both educators and families would likely face, participants expressed that they were able to find meaning and relevance in the topics that were covered. For example, one participant stated, "These cases really hit home. I think we can all relate to [the topic being presented]." Another participant shared, "We all feel the pressure, but hearing these cases makes me know we are in this together. It helps when people are real about their challenges." As suggested in Self-Determination Theory, the need for autonomy is supported when learning opportunities are relevant and meaningful to participants and as they see how new learning is practical in their roles (Niemiec & Ryan, 2009; Ryan & Deci, 2017). Similarly, participants' competence was supported as they participated in case-based learning opportunities that were directly applicable to their roles as educators and/or parents. The real-life, practical nature of the cases allowed participants to gain knowledge and skills in areas that transferred directly to their everyday environments. Participants expressed the applicability of the content in the case scenarios. One participant said about the applicability of the topics, "It keeps me coming back. I always learn something that I can use." One educator shared, "Attending TeleNGAGE has given me a lot of new ideas to try at school. I have learned so much." Self-Determination Theory suggests that competence is supported when individuals feel that they are able to effectively bring about desired outcomes in their environment (Niemiec & Ryan, 2009). The use of case-based learning supported participants' needs for competence as they were able to apply practical knowledge to produce desired goals in their everyday settings.

Figure 1. Case Submission Format



Oklahoma State University TeleNGAGE TeleECHO™ Case

- Student's grade range
- If the case presentation involves an individual student, what is the current status of the student?
- Please identify the primary concern about an individual student or school or district program and the goal for this case presentation.
- Describe contributing factors that may have negatively impacted the progress of the individual student or the effectiveness of the school or district program.
- For individual student cases only: what are common triggers, stressors and/or factors related to the priority concern?
- For program only: what are the strengths, challenges, opportunities and threats to your program?
- What strategies, interventions, or other actions have you tried, and how successful have they been?
- Comments or additional background narrative. What else should the team know in order to provide feedback and recommendations?

Didactic Sessions

Didactic sessions seemed to support participants' needs for autonomy and competence. The didactic sessions were brief presentations delivered by a guest speaker or a hub team member. The topics of the didactic presentations were closely aligned with the topics covered in the case-based scenarios, making them relevant to the case as well as meaningful to the participants. The presentations followed a theory-to-practice structure in an attempt to help participants connect conceptual knowledge to practice. This knowledge was then used to guide the discussions of the problem presented in the case. This format, connecting theory to practice, allowed participants to immediately apply and draw upon new knowledge in a context that represented real-life situations. As participants used what they learned

from the didactic presentation to think deeply about the case scenario, they were challenged to expand their current understandings and ways of thinking. For example, when describing a previous didactic session, one participant stated, “I never thought about forgiveness being important in the workplace, I have introduced this idea to my teachers. It is making a difference.” Self-Determination Theory explains that competence is built when learners engage in optimally challenging situations that expand their knowledge and skills (Niemiec & Ryan, 2009) and when they feel that they are effective at solving problems (Ryan & Deci, 2017). The well-aligned topics of the didactic and case sessions provided an opportunity for participants to build these feelings of competence. Participants’ need for autonomy was also supported as new knowledge gained in the didactic sessions was immediately relevant to the case. Because the topics were connected to real-life cases, participants could see the meaningful nature of the content, supporting their need for autonomy.

Figure 2. A Didactic Session Example

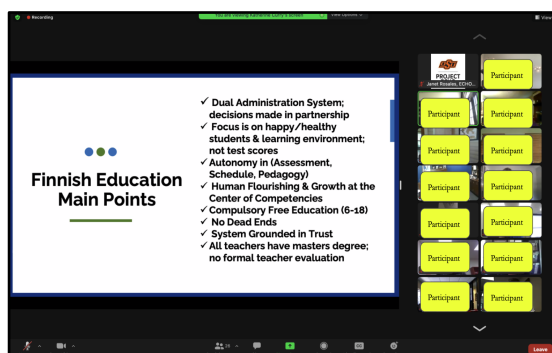


Figure 3. A Web-based Database for TeleNGAGE

The screenshot shows a web-based database interface for TeleNGAGE. The title is "OSU TeleNGAGE > Session resources and didactic recordings". Below the title is a table with the following data:

Session Title	Date	Facilitator	Duration
4.22.22 It Takes a Village: The Importan...	2022년 4월 22일	Jessica T...	3개 파일
4.28.2021 Student First Amendment Ri...	2022년 3월 16일	Jessica T...	2개 파일
4.14.2021 Choosing our Battles: Manag...	2022년 3월 16일	Jessica T...	2개 파일
3.24.2021 Family Engagement in School...	2022년 3월 16일	Jessica T...	2개 파일
3.10.2021 Building Bridges of Trust: Int...	2022년 3월 16일	Jessica T...	2개 파일
2.24.2021 Appreciative Inquiry: A M...	2022년 3월 16일	Jessica T...	3개 파일
2.10.2021 Enhancing engagement amo...	2022년 3월 16일	Jessica T...	3개 파일
1.27.2021 Tweaking 21st Century Skills...	2022년 3월 16일	Jessica T...	2개 파일

Discussions

In each TeleNGAGE session, discussions that followed didactic presentations allowed participants to reflect upon their learning and to exchange insight and ideas with others. Participant perceptions, when reflecting on the discussion portions of TeleNGAGE sessions, indicated that their primary perception of discussions emphasized the relational connections that emerged and the competence that they felt as they learned together. Specifically, participants remained engaged primarily because they connected with each other as they reflected upon new information. This new information frequently was applicable to commonly experienced challenges, adding depth to their learning. As explained through Self-Determination Theory, individuals have a psychological need to experience attachment to others (Deci & Ryan, 1985), and when unexpected positive encouragement or feedback is offered, the individual feels intrinsically motivated to persist in goal pursuit. This explanation suggests that TeleNGAGE supported participants' psychological need for relatedness. Additionally, feedback supported individual participant's feeling of competence when their voices were heard and insights were validated in a group setting. Therefore, our findings suggest that the collaborative learning aspect of TeleNGAGE, following the mantra, “all teach and all learn,” supported participant needs for competence. For example, one participant explained, “This discussion helped me understand how important it is to give someone ‘the benefit of the doubt.’ I usually jump to conclusions, and that discussion made me realize that I need to really understand what is going on [before deciding to act.]” This participant response highlights the importance of relational connection and the learning that emerged through discussions. This finding is supported in the literature. Redmond, et al., (2018) found that discussions help participants learn from each other beyond learning from an authority figure or expert, such as a faculty member. In sum, discussions regarding shared concerns facilitated relationships (relatedness support) as participants recognized their commonalities and as they gained new insights regarding how to address commonly experienced challenges (competence support). This finding is further supported by findings in the literature. For example, a study from Terenzini et al (2001) examined the effectiveness of collaborative learning compared to a traditional learning design. Findings from the study support similar findings in the literature that students more rapidly achieved learning outcomes and developed communication skills in collaborative learning environments (Nokes-Malach et al., 2015). Moreover, according to Barbour (2007), interaction is one of the keys to creating and sustaining an online community. Findings from this study further support this contention.

Accessibility

In order to facilitate engagement, easy access is essential for most learners (Carmichael, 2022). The Covid pandemic placed severe limitations on individual's ability to connect with others or to gain new knowledge and skills. Our findings suggest that accessibility was an important component for sustained participation in TeleNGAGE. Specifically, three main factors facilitated participation: easy access through zoom technology, meetings scheduled at a convenient time, and the TeleNGAGE website that allowed participants to access information even after sessions ended. Participants

explained that having the zoom link shared via email encouraged their participation. Additionally, participants were able to join TeleNGAGE sessions with any personal device such as a phone or laptop computer. The scheduling of sessions was important to participants also. Because TeleNGAGE hosted one hour sessions biweekly at noon, educators, families, and community members were able to join during their lunch hour. Finally, TeleNGAGE utilizes a web-space to store all data including cases, recommendations, and any educational resources that are provided during the sessions (Figure 3).

This finding aligns with other findings in the literature. For example, Snyder (2009) found that using a web-tool enhances interaction between learners and resources. Further, the TeleNGAGE web-space is a critical part for the online environment because participants can gain access at any time and at their own pace beyond the session time. This finding is best explained through autonomy support of Self-Determination Theory. Because participants could choose to join any session that they were interested in and they could access the TeleNGAGE website as needed, the psychological need of autonomy motivated these participants toward consistent engagement. This finding aligns with other findings in the literature that suggest that online learning not only opens the access to educational resources to learners in remote areas, but also offers the opportunity that learners can join for high quality learning at their physical locations. With these reasons over time online or virtual learning environments have been actively expanded (Cavanaugh et al., 2009).

Implications

The importance of family engagement cannot be underemphasized as a means to enhance student education. Findings from his study suggest that TeleNGAGE, as a form of family engagement, provided an opportunity for family members, educators, and schools to learn together, collaboratively, via an online platform during one of the most pressing crisis events in recent history, the Covid pandemic. In this study, four key elements in the online learning environment have been discussed regarding how participant psychological needs were met through those key components. The use of real case-based scenarios that are presented anonymously (yet submitted by participants) supported participant needs for autonomy and relatedness. Didactic sessions supported participant needs for competence as information was presented by experts in their respective fields. Discussions primarily provided relational and competence support as participants engaged with each other and reflected upon their learning. Accessibility primarily supported participant needs for autonomy as individuals were able to join TeleNGAGE sessions remotely at a time convenient for them. Additionally, resources posted on the TeleNGAGE website could be easily accessed for future use, reflecting an autonomous approach to resource availability.

Implications from this study are numerous. Though not generalizable, findings from this study suggest that this platform supported participant psychological needs of competence, autonomy and relatedness. As interpreted through the lens of Self-Determination Theory (Ryan & Deci, 2017), the meeting of psychological needs encouraged sustained engagement between families, schools and community members. This finding is important and warrants further investigation. Specifically, because effective family engagement initiatives are rare (Rispoli et al., 2018), schools may be able to more successfully engage families when they consider family psychological need fulfillment in engagement efforts. Providing opportunities for families to engage in ways that provide autonomy support, competence support, and relatedness support may offer a key for sustainable family/school partnerships that actually enhance student learning. An additional contribution from this study is that this online, collaborative engagement platform motivated families and community members for engagement. Creating an online space for collaborative learning may be a key factor for successful engagement initiatives as well. Additional research is needed to investigate other types of online family engagement initiatives to understand their capacity for sustainable engagement. Further research could also seek to understand the influence of collaborative problem solving through real-case scenarios of sustainable family engagement efforts.

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