International Journal of TESOL Studies (2022)
Vol. 4 (3) 66-77 https://doi.org/10.46451/ijts.2022.03.06

Article

English Language Learners' Experience with Learning Management Systems

Taylor Davis*
Geneva Tesh
University of North Texas, USA

Received: 15 November 2021/Accepted: 30 May 2022/Published: 30 July 2022

Abstract

The COVID-19 pandemic forced many educators and students around the world to shift abruptly from a face-to-face environment to an online learning management system (LMS). This change of environment proved especially difficult for English language learners (ELLs) in the United States. Some of the challenges for ELLs include technology issues, lack of facility with the LMS, limited comprehension of written instructions, time management difficulties, social isolation, and low motivation. This paper discusses those challenges and examines the benefits and shortcomings of using an LMS for lessons, assessments, and communication among ELLs. This qualitative study investigates the experiences of ELL students enrolled in a Dallas, Texas area high school during the COVID-19 pandemic and their attitudes towards completing coursework through an LMS platform.

Keywords

COVID-19 pandemic, English Language Learners, high school, online learning, ESL, learning management systems

1 Introduction

As the COVID-19 virus began to spread rapidly in early 2020, most public schools in the United States closed in response to help slow the spread of the virus and to protect students and teachers from getting sick. The U.S. Census Bureau (2020) reported nearly 93% of households with school-aged children engaged in distance learning at that time. As schools shifted abruptly from traditional classrooms to digital platforms, students were expected to adapt immediately to online learning, and teachers were expected to provide sound instruction to all students through learning managements systems, while also implementing necessary accommodations, modifications, and scaffolding for English Language Learners. This study investigates the experiences of high school (secondary education) English Language Learners engaged in online learning via a learning management system during the COVID-19 pandemic.

Email: TaylorDavis8@my.unt.edu

2 Context

The setting for this qualitative study was a public high school in Dallas, Texas, USA. The target population consisted of a small group of ELLs enrolled in grades 9-12. The study took place at the end of the 2020-21 school year, during which time all students in the school were engaged in some form of distance learning. The targeted school district consists of urban and suburban communities with a diverse mix of students, over 45 percent of whom are ELLs.

All students in the targeted school district complete the State of Texas Assessments of Academic Readiness (STAAR), standardized tests covering the core subjects of reading, writing, mathematics, science, and social studies. Publicly released STAAR results from statewide testing in Texas show learning loss in several subjects. In nearly all subjects, STAAR data indicate ELLs struggled in distance learning compared to native English-speaking students. The chart below shows, while native-English speaking African American and White students showed growth when comparing 2019 and 2021 English 1 scores (see Table 1), ESL (English as a Second Language) students did not.

Table 1

TEA Statewide Summary Report Data (Did Not Pass)

STAAR English 1 2019 Did Not Pass		STAAR English 1 2021 Did Not Pass	
ESL:	79%	ESL Students:	81%
African American:	74%	African American:	73%
White:	66%	White:	59%

Source: https://tea.texas.gov/student-assessment/testing/staar/staar-statewide-summary-reports

A 2019 to 2021 comparison of STAAR data from the targeted school, which has over 1,000 ELLs, shows learning gaps in English 1, English 2, Biology, and US History compared to the district average. Compared to the rest of the school district, the campus with the highest number of ELLs had a much higher test failure rate in nearly all subjects, as illustrated in Table 2.

Table 2

ESL/LEP Campus and District STAAR Failure Comparison

Campus w/ 1000+ LEP students			District Average		
	2019	2021		2019	2021
English 1 Failure:	33.5%	56.5% (+23)	English 1 Failure:	24.6%	40.9% (+16)
English 2 Failure:	25.7%	52.2% (+26)	English 2 Failure:	21.8%	36.6% (+14)
Algebra 1 Failure:	5.0%	22.5% (+17)	Algebra 1 Failure:	7.1%	30.5% (+23)
Biology Failure:	8.1%	27.0% (+19)	Biology Failure:	8.6%	21.5% (+12)
US History Failure:	6.4%	19.3% (+13)	US History Failure:	4.2%	15.0% (+11)

Source: https://mydata.dallasisd.org/ (Internal site)

In a previous study, we sought to measure and understand the perceptions of online learning at the targeted high school by conducting a quantitative study consisting of a Likert-based questionnaire (Davis & Tesh, 2021). We collected 98 survey responses from 44 ELLs and 54 native English speakers enrolled

at the school, using the native English speakers as the control group and the ELLs as the experimental group. The survey questions examined students' perceptions of the challenges, risks, and best practices using distance learning. We used SPSS statistical tools to validate the study and perform an exploratory factor analysis. Our study revealed that while many ELLs were positive in their perceptions of online assignments, they did not have equitable access to technology needed to complete the assignments. We found students enrolled in grades 11 and 12 were comfortable finding and completing online assignments, while younger students demonstrated much lower confidence. In addition, younger students expressed lower confidence in speaking on synchronous video calls and reported having fewer interactions with their teachers online. Across grades, students reported having limited opportunities to practice their English reading, writing, speaking, and listening skills.

Recognizing the need for more research pertaining to ELLs' experience with online learning through LMSs, our current study seeks to understand how ELLs use an LMS for online learning, what benefits they perceive from LMS use, and what challenges they face. Bearing in mind the challenges involved in online learning for ELLs, this study considers the following research questions.

1. What overall perceptions do high school ELLs have of LMS platforms?
2. What affordances do LMS platforms offer ELLs?
3. What challenges do ELLs face when using an LMS to attend class and complete assignments?

3 Literature Review

3.1 Learning management systems

Learning management systems (LMSs) are also known as learning portals, distributed learning systems, content management systems, course management systems, and online learning platforms (Ahmed & Mesonovich, 2019). Popular LMSs include Google Classroom, Schoology, Canvas, and Blackboard. During the COVID-19 pandemic, many educators discovered LMSs are much more than a tool for organizing course materials. As schools across the world closed to help stop the spread of COVID-19, LMSs became the actual classroom, places in which teachers store and organize content, communicate and interact with students, create and distribute assignments, and hold virtual class meetings. Azhar and Iqbal (2018) found that "Google Classroom has been used effectively for uploading assignments, classroom management, and communication with the students" (p.63). Sapio et al. (2017) suggested the main advantages of using digital classrooms are the opportunities to organize material and learn new computer programs. Jeong and Hmelo-Silver (2016) added that a critical affordance of LMSs is the ability to provide easy access to resources for the learner.

One of the most important affordances of an LMS is communication. Students described LMSs as a technology that supports communication while collaborating within a group (Asino & Pulay, 2019). LMSs provide a diverse array of communication mediums (chat, instant messaging, email, asynchronous discussion boards, and synchronous videoconferencing) that offers affordances to collaborate. Research has shown that within an LMS "discussion boards are used more frequently than email in asynchronous communication, and chat platforms were the technology of choice over video-conferencing in synchronous collaboration" (Jeong & Hmelo-Silver, 2016, p. 249). The affordances of collaboration and communication in LMSs allow teachers to monitor students' work successfully and provide real-time feedback. Teachers noted that students who accept feedback are easy to track because students usually make changes by accepting or rejecting the comments teachers make in Google Docs. Teachers often viewed the history of assignments to see changes made based on feedback. Communication has also been perceived as a weakness in LMSs in some circumstances. Although students took online courses to be independent in learning, they also stated a request for clear assignment directions and course access information (Armstrong, 2011). Some students expressed frustrations that teachers were often missing from academic conversations or difficult to reach.

The use of an LMS can be a motivating factor because it fosters independence. According to Chandra and Mills (2015), "Students were motivated and connecting well with the technology-driven activities" (p. 292). Students reported that their LMS allowed them to develop their own learning styles and approaches to content to harness the maximum benefits in their online classes (Gurung & Rutledge, 2014). Gurung and Rutledge's study also found that students used LMS technology dynamically, essentially adapting to their own learning needs and goals. Rather than being given content and told what to learn, the LMS required students to evaluate their own needs, thereby empowering students to take control of their learning (Rowe & Rafferty, 2013).

Over time, usage of LMS platforms like Google Classroom became natural to students, culminating in habits. "Thus, the hedonic motivation obtained from Google Classroom induced students to get fond of using Google Classroom, which ultimately became a habit" (Kumar & Bervell, 2019, p. 1810). On the other hand, distractions pose some problems. Educational researchers have expressed concerns about students' personal use of information and communication technologies. Neiterman and Zaza (2019) argue that it is well established that laptop multitasking has a negative implication for learning. Technology causes habitual distractions that draw students away from educational activities; this is neither a deliberate choice nor an involuntary reflex triggered by pop-ups (Aagaard, 2015). Students often blurred the line between the personal and academic usages of technology (Gurung & Rutledge, 2014). Students recognized that such distractions were detrimental to their learning but often maintained that distracted actions were unconscious and the outcome of impulse or habit.

While research on LMSs is extensive, especially in light of the pandemic, research on LMSs pertaining specifically to ELLs is noticeably lacking. More research is needed to address if and how LMSs accommodate teachers', students', and families' needs by providing adequate online ELL learning supports and training. LMSs offer several affordances for learning; however, it is unclear how such affordances apply to ELLs. Another research gap includes the use of specific linguistic tools, such as online dictionaries and translators, afforded by some LMSs, and whether those tools are adequate and useful.

3.2 English language learners

Students who are identified as English Language Learners (ELLs) in public schools in the United States make up roughly ten percent of the total student population, according to the National Center for Education Statistics (2021). While most of these students can participate in language assistance programs to help acquire the linguistic proficiency necessary for meeting achievement standards and successfully completing their academic coursework, ELLs remain a vulnerable student population, tasked with the formidable challenge of crossing linguistic and sociocultural barriers to meet the same standards, compete against, and complete the same coursework as their native English-speaking classmates.

The COVID-19 pandemic exacerbated these challenges and widened the gap between ELLs and native English speakers even further by adding the additional challenge of the digital divide. The abrupt transition to learning via a digital platform proved difficult for all students, but those without adequate digital literacy or access to technology faced even greater difficulty. Sharfstein and Morphew (2020) described the "COVID slide" as the loss of students' educational gains due to the pandemic and claimed that the slide will likely be most significant among those students who are already at risk, such as ESL students.

One noticeable indication of the special challenges online learning presented for ELLS was the huge surge in absenteeism. Lehrer-Small (2021) reported soaring absenteeism among ELLs, noting that while chronic absenteeism increased across the country during the pandemic, ELLs suffered a disproportionate jump with absentee rates doubling and even quadrupling in some districts. Citing lack of equipment and access, financial hardship and stress, increased chores, childcare responsibilities for younger siblings,

and difficulty navigating English-only instructions on LMSs as chief reasons why ELLs were unable to attend class during the pandemic, Lehrer-Small (2021) describes the situation as "a double disadvantage created by simultaneous linguistic and digital divides" (para. 21).

Even before the pandemic, the digital divide increased learning gaps for at-risk students such as ELLs. According to Warschauer (2004) many distance learning students were at risk due to connectivity gaps and lapse in face-to-face accommodations. A RAND Corporation study found that in 2017 only 72 percent of children in the lowest income bracket had high-speed internet services at home; this disproportionally affects low-income ELLs (Schwartz et al., 2020). Lazarín (2020) reported that many immigrant households were unequipped with computers or internet connectivity during the pandemic and often had to rely instead on mobile phones and data plans for remote learning.

In addition to lack of access, inadequate digital and media skills creates further learning problems for ELLs. Warschauer (2004) has argued that technology is not used well in secondary ESL programs because students in these programs are treated as "remedial" and lacking the language skills needed to complete more complex tasks that involve research and critical thinking; instead, these students used computers primarily for rote, isolated drill-and-practice activities. In other words, when the pandemic occurred, many ELLs lacked digital experience and had not been properly trained to use the technology they would soon rely on as their sole means of communicating with teachers and completing class activities and assignments. Gaston (2020) reasoned that successful integration of online learning requires the development of media literacy education for ELLs who are prone to struggle in fully online media platforms. This literature indicates the need for more research on improving the application of technology in the ELL classroom.

Finally, language barriers create problems. Low English language proficiency students struggle with the rigorous amounts of reading and writing required for success in online environments (Sailsman, 2020). This impacts students' desire and ability to learn online. The challenges are both content and language difficulty, which may keep learners from benefiting from computer-assisted learning environments. Yen and Mohamed (2020) found lack of vocabulary knowledge to be a key problem in hindering ELLs from participating in online activities. Lack of language proficiency may lead to a lack in confidence. According to Ying et al. (2020), "Learners have difficulty expressing themselves because they are fearful of making mistakes. They often lack adequate vocabulary and practice, making it difficult for them to converse fluently in English" (para. 5).

ELLs must continue to develop their English language skills, whether their classes are in person or online. With all the technical difficulties that arose from distance learning, the usual scaffolding and linguistic accommodations may not have been prioritized during the pandemic. Hartshorn and McMurry (2020) found that the challenge of media literacy is exacerbated by online learning environments that offer limited opportunities for ESL students to practice their language skills with other students and teachers. Poor media literacy skills and a lack of speaking and listening opportunities resulted in difficulties for ESL students to complete online schoolwork regardless of their ability to use technology. This supports the need for more research into what speaking and listening opportunities ELLs are motivated to participate in.

In general, more research is needed on high school ELLs engaged in LMS classroom instruction in the US. There are numerous international papers, but a vast majority pertain to primary (kindergarten through eighth grade) school or higher education students. With this gap in research, it is difficult to determine the underlying causes of learning gaps for ELLs in LMS environments.

4 Methodology and Rationale

The theoretical framework for this solution approach is based on grounded theory. Glaser and Strauss (2017) argue that theory based on data cannot be easily refuted. This approach is the opposite of

deducing a theoretical framework from a term known as "exampling," the practice of finding an example from speculative or logically deduced theories after an idea has occurred. Glaser and Strauss describe grounded theory as generating theory from data, which includes collecting data, coding, and analysis. It is the research team's role to make decisions about further avenues and details to explore based on the data collected.

Given the limited research in this field, it is difficult to address this problem without relevant data. This solution approach aims to gather relevant data to analyze that will inform best practices associated with secondary ELLs in computer-assisted learning environments. This research study used a qualitative-method design to answer the proposed research questions. The study consisted of semi-structured focus group interviews.

4.1 Participants

A previous study was conducted with 44 ELLs from a Dallas, Texas area high school. The participants responded to a recruitment email message containing a call for volunteers. The student volunteers, along with their legal guardians, signed a consent form that included a description of the research study, procedures, risks and benefits, participant rights, and confidentiality. From the initial pool of 44 ELLs at the targeted high school in Dallas, Texas, eight volunteers were invited to participate in a focus group interview.

4.2 Researchers

In qualitative research, the researchers bring their own background, beliefs, biases, and assumptions to the investigation (Glaser & Strauss, 2017). The researchers of this study include a community college ESL professor and a high school instructor, both of whom are engaged in scholarly research through the University of North Texas. The researchers explained their roles to the participants. The high school instructor further acknowledged his role as the instructional coach, responsible for mentoring teachers, in the school where the participants were enrolled. The researchers relied on participants' quotes to substantiate findings from the study. To minimize bias, the researchers adopted a naïveté stance to drop any presuppositions and judgment while maintaining openness to new and unexpected findings (Tracy, 2019). The dynamic nature of this interview style allowed respondents to be more active than is possible in a structured survey (Creswell, 2008).

4.3 Interview

The interview used semi open-ended questions to create a dialog with students about their perceptions of online learning. The researchers aimed to create a comfortable interview environment to increase natural dialog and insights from the focus group. The duration of the interviews was 60 minutes with two adult researchers present. The researchers recorded the interviews on Zoom, a videoconferencing tool. Field notes captured observations that could not be captured in the digital recording. Digital recordings were transcribed, and the data acquired underwent a comprehensive analysis by coding and categorizing the data. The following questions, all of which pertain to the participants' use of an LMS, guided the interview.

1. Do you use online classroom features to communicate with your instructor or other students? If so, how?
2. In your opinion, does Google Classroom help increase student to student communication? Please explain your reasoning.
3. What is your opinion of the student to teacher communication features available in online classes?

4. How have online classes changed your study habits?
5. What impact has online learning management systems had on your productivity or organization?
6. Have you learned anything from being in online classes?
7. Can you describe any issues you experience when using Google Classroom?
8. What features in Google Classroom are the most beneficial to your learning? Why?
9. If you could make one change or addition to online learning, what would it be and why?
10. How has online learning supported/helped your learning?
11. Has online learning helped you develop any skills that are useful in your day-to-day life?
12. How has online learning impacted your level of participation and motivation in class?
13. Do you think that your teacher is effective at teaching in an online environment? Explain.
14. What are your thoughts on completing assignments in online classes?
15. Do you feel comfortable speaking in synchronous video classes, such as Zoom? Why or why not?
16. Do you participate in online discussion boards? Why or why not?

Participants were given a copy of the interview questions a few weeks before the interview to have time to consider the questions and prepare their responses. At the beginning of the interview, participants were told to describe their experiences using the LMS, Google Classroom, at their high school during the COVID-19 pandemic. Participants were encouraged to talk freely when responding to the open-ended questions. When needed, probing questions and clarification questions were posed to encourage participants to elaborate on some topics.

4 Results

Participants talked openly and were eager to share their experiences and challenges with online learning, specifically through an LMS platform. All participants in this study received instruction through Google classroom, the school's LMS. The most salient themes of the interview were communication, organization, technical skills, distraction, and motivation.

Theme 1: Communication

Communication with teachers and classmates was a pressing concern. Participants reported that they did not communicate through Google classroom. According to Participant 1 "We text each other through social media. We don't actually use Google classroom to do that (communicate)." Participant 3 agreed, adding, "I didn't know you could do that, communicate through Google classroom." The participants said classmates did not communicate with each other very often, and when they did, it was through private text. Their teachers used apps such as Remind 101, intended for communication in educational contexts. When asked how important communication is, the participants agreed it is very important to have clear, consistent communication from their teacher. Participant 1 reported, "I think that if your teachers don't send you messages, they don't care about you." In the participants' view, teacher communication is not merely a vehicle for relaying information and instructions, but also a means to express concern for students' well-being.

Theme 2: Organization

Organization was presented as an advantage of online learning. All participants agreed that, in regards to staying organized, the LMS made distance learning easier than a traditional face-to-face environment. Participant 2 praised the LMS, claiming, "it makes you feel productive to have everything well

organized, to have everything in one place." Another participant said it was easy to access all of the assignments and course resources through the LMS. Other students appreciated having access to in-class assignments and being able to go back to review old assignments. Neatly organized, accessible course materials accessible helped students gain confidence in online learning.

Theme 3: Technical Skills

Participants had mixed feelings about technical skills. Participant 4 complained about the expectation to be online and on camera during class. He explained, "There are some teachers that force us to turn on the cameras and the microphone, and there are people who have siblings at home, and they make noise." Other participants express gratitude for having had the opportunity to gain better technical skills. Participant 2 added, "I like being able to use my computer. There will be more chances to learn a lot of new things on my computer that I haven't done and that I wouldn't have learned if it weren't for online learning."

Theme 4: Distraction

Participants reported distraction as presenting the biggest challenge with online learning. While one student reported feeling more comfortable doing homework at a relaxed pace and learning how to be more responsible about attending class and meeting assignment deadlines, others reported that it is all too easy to get distracted at home on the internet. Participant 3 summed it up, stating "I think it's been quite challenging because we're not at school. I am distracted by my phone and everything around me, and I know that no one's watching me."

Theme 5: Motivation

The next biggest challenge was motivation. Participants reported a lack of engagement. Some participants defended their teachers, with Participant 1 reporting that she "felt bad for the teacher" because almost no students would speak up or even comment in the chat window during online synchronous class sessions. Participant 8 agreed that, while the teacher was energetic and asked questions during class, "there was no participation from the students." Participant 1 said she began offering her teacher words of encouragement because she wanted the teacher to feel better. The theme, here, seemed to be that students felt motivated, though somewhat distracted, when working on assignments on their own. However, they did not feel motivated to attend class because synchronous lessons were awkward and uncomfortable.

5 Discussion

The participants in this study expressed overall positive attitudes towards online learning through the use of an LMS. While some expressed uncertainty or low confidence in their technical skills, they recognized the importance of having strong computer skills and showed an eagerness to learn and develop those skills. All participants seemed pleased with the organization of course materials within their LMS. In a face-to-face classroom environment, ELLs must absorb a lot of information in a short period of time. An LMS provides the luxury of written instructions and course content that students can read as many times as they need (Sailsman, 2020). ELLs may also find the ability to pause and look up unfamiliar words extremely helpful.

It was not surprising to learn ELLs struggled with distractions when studying via an LMS. In an online environment, distractions are likely difficult for any student to manage, regardless of their English proficiency or even their age. For ELLs, it is particularly important not to fall behind, as they are

expected to make large gains in language proficiency while simultaneously meeting the same academic standards as their native English-speaking counterparts in all other content areas.

One area of online learning that needs much more attention is student engagement and motivation. In an English language classroom, students need plenty of opportunities to engage with one another and practice speaking as much as possible. Teachers need to find more ways to encourage active class participation and communication between students, particularly with ELLs, who may lack the confidence required to participate in a classroom setting with native English speakers (Ku & Lohr, 2003) or who may come from cultural settings in which classroom socialization and interaction are not common (Zhang & Kenny, 2010). Regardless of their reasons for not engaging in online coursework, ELLs need to be guided and encouraged to participate actively as this is an important form of collaborative learning (Choo et al., 2014) that can help increase language skills and promote critical thinking (Sailsman, 2020).

The participants in this study understood the importance of the teacher's role in facilitating a successful LMS learning environment. Students who felt the teacher cared about them were more motivated to engage in learning, while those who felt their teacher was not invested in their learning expressed greater frustration and less motivation. This points to a need for faculty to be better trained in using the LMS to communicate with and engage students.

6 Limitations

Several limitations should be considered when reviewing the findings of this study. First, this study was conducted by ESL practitioners, who bring their own insights and understanding of the experience of online learning for ELLs, and whose biases and opinions may have sometimes guided the focus group dialogue. Second, the study was limited to a single high school in one school district. While the participants came from a variety of linguistic and socioeconomic backgrounds, it would be helpful to hear from students in high schools across the U.S. Another challenge included the sociolinguistic difficulty some of the younger students, those in ninth and tenth grade, had in describing their experiences during the focus group interview.

7 Conclusion

Though faced with many challenges in online learning, ELLs appreciate the organization of online coursework, the ability to look up unfamiliar words and new information, and the opportunity to develop digital literacy and technical skills. Some of the biggest challenges are having access to technology, eliminating distractions, finding opportunities to interact and engage with classmates, and feeling motivated to attend class and complete assignments. Both the literature review and the results from our study point to the need for further research into ELLs in computer-assisted learning environments. Educators need a better understanding of the ways in which ELLs struggle in online platforms. ELL teachers and students have struggled to familiarize themselves with the online tools available. We need more research to understand which tools are the most effective for ELLs. Most importantly, future research should address ways in which teachers can use online tools to promote communication and student engagement. As we have seen, lack of engagement impacts students' motivation and desire to learn online.

References

Aagard, J. (2015). Drawn to distraction: A qualitative study of off-task use of educational technology. *Computers and Education.*

Ahmed, K., & Mesonovich, M. (2019). Learning management systems and student performance. *Int. J. Sustain. Energy*, 7, 582-591.

Armstrong, J.S. (2011). Natural learning in higher education. *Encyclopedia of the Sciences of Learning.* Springer.

Asino, T.I., & Pulay, A. (2019). Student perceptions on the role of the classroom environment on computer Supported collaborative learning. *Techtrends*, 63, 179–187.

Azhar, K. A., & Iqbal, N. (2018). Effectiveness of Google classroom: Teachers' perceptions. *Prizren Social Science Journal, 2*(2), 52–66.

Catalano, A.J., Torff, B. and Anderson, K.S. (2021). Transitioning to online learning during the COVID-19 pandemic: differences in access and participation among students in disadvantaged school districts. *International Journal of Information and Learning Technology, 38*(2), 258-270.

Creswell, J. W. (2008). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage.

Chandra, V., & Mills, K.A. (2015). Transforming the core business of teaching and learning in Classrooms through ICT. *Technology, Pedagogy and Education, 24*(3), 285-301.

Choo, L., Kaur, G., Fook, C., & Yong, T. (2014). Patterns of interaction among ESL students during online collaboration. *Social and Behavioral Sciences, 123,* 307-314.

Davis, T., & Tesh, G. (2021, October). Online learning through the eyes of students with limited English proficiency. In *SITE Interactive Conference* (pp. 8-14). Association for the Advancement of Computing in Education (AACE).

Gaston, J. (2020). Teaching media literacy to ESL and EFL students in the age of COVID-19. *GATESOL in Action Journal*, 30(1), 48-58.

Glaser, B. G., & Strauss, A. L. (2017). *Discovery of grounded theory: Strategies for qualitative research*. Routledge.

Gurung, B., & Rutledege, D. (2014). Digital learners and the overlapping of their personal and educational digital engagement. *Computers and Education, 77,* 91-100.

Hartshorn, K. J., & McMurry, B. L. (2020). The effects of the COVID-19 pandemic on ESL learners and TESOL practitioners in the United States. *International Journal of TESOL Studies*, 2(2), 140-157.

Jeong, H., & Hmelo-Silver, C. (2016). Seven affordances of computer-supported collaborative learning: How to support collaborative learning? How can technologies help?, *Educational Psychologist*, *51*(2), 247-265.

Kabigting, R. P. (2020). Computer-assisted instruction and students' comprehension of a literary text. *Journal of English Language Teaching and Applied Linguistics, 2*(2), 40-47.

Krishan, I. A., Ching, H. S., Ramalingam, S., Maruthai, E., Kandasamy, P., De Mello, G., & Ling, W. W. (2020). Challenges of learning English in 21st century: Online vs. traditional during covid-19. *Malaysian Journal of Social Sciences and Humanities (MJSSH), 5*(9), 1-15.

Ku, H.Y., & Lohr, L. (2003). A case study of Chinese students' attitudes toward their first online learning experience. *Educational Technology Research and Development, 51*(3), 95-102.

Kumar, J.A., & Bervell, B. (2019). Google Classroom for mobile learning in higher education: Modelling the initial perceptions of students. *Education and Information Technologies 24*(2), 1793–1817.

Lazarín, M. (2020). *COVID-19 spotlights the inequities facing English learner students, as non-profits organizations seek to mitigate challenges*. Migration Policy Institute.

Lehrer-Small, A. (2021). Absenteeism surged among English language learners during pandemic. *The 74 Million*.

Neiterman, E., & Zaza, C. (2019). A mixed blessing? Students' and instructors' perspectives about off-task technology use in the academic classroom. *The Canadian Journal for the Scholarship of*

Teaching and Learning, *10*(1).

Rowe, F. & Rafferty, J. (2013). Instructional design interventions for supporting self-regulated learning: Enhancing academic outcomes in post-secondary e-learning environments. *MERLOT Journal of Online Teaching and Learning, 9*(4).

Sailsman, S. (2020). ESL students learning online: A review of literature. *Quarterly Review of Distance Education, 21*(1), 45-52.

Sapio, B., Nicolò, E., & Papa, F. (2017). User experience in a digital classroom: Qualitative investigations with teachers and students. *IADIS International Journal on WWW/Internet*, 15(1).

Schwartz, H., Ahmed, F., Leschitz, J., Uzicanin, A., & Uscher-Pines, L. (2020). *Opportunities and challenges in using online learning to maintain continuity of instruction in K-12 schools in emergencies*. RAND Education Project, Beyond school closures: Social distancing in K-12 schools.

Sharfstein, J. M., & Morphew, C. C. (2020). The urgency and challenge of opening k-12 schools in the fall of 2020. *Journal of the American Medical Association, 324*(2), 133–134.

Tracy, S. J. (2019). *Qualitative research methods: Collecting evidence, crafting analysis, communicating impact*. John Wiley & Sons.

Wang, Q., Woo, H. L., Quek, C. L., Yang, Y., & Liu, M. (2012). Using the Facebook group as a learning management system: An exploratory study. *British Journal of Educational Technology, 43*(3), 428–438.

U.S. Census Bureau. (2021, December 21). *Nearly 93% of households with school-age children report some form of distance learning during COVID-19*. Census.Gov. https://www.census.gov/library/stories/2020/08/schooling-during-the-covid-19-pandemic.html

U.S. Department of Education, National Center for Education Statistics. (2021). *The Condition of Education 2021 (2021-144), English Language Learners in Public Schools*.

Warschauer, M. (2004). *Of digital divides and social multipliers: Combining language and technology for human development. Information and communication technologies in the teaching and learning of foreign languages: State of the art, needs and perspectives* (pp. 46-52). Moscow: UNESCO Institute for Information Technologies in Education.

Warschauer, M., Knobel, M., & Stone, L. A. (2004). Technology and equity in schooling: Deconstructing the digital divide. *Educational Policy, 18*(4), 562–588.

Winthrop, R. (2020). *Top 10 risks and opportunities for education in the face of COVID-19*. Brookings Institute.

Yen, E. L. Y., & Mohamad, M. (2020). Utilising E-Learning to Assist Primary School ESL Pupils in Learning to Spell during COVID-19 Pandemic: A Literature Review. *Creative Education*, *11*, 1223-1230.

Ying, H.Y., Siang, W., & Mohamad, M. (2021). The challenges of learning English skills and the integration of social media and video conferencing tools to help ESL learners coping with the challenges of the pandemic: A literature review. *Scientific Research, 12*(7).

Zhang, Z., & Kenny, R.F. (2010). Learning in an online distance education course: Experiences of three international students. *International Review of Research in Open and Distance Learning, 11*(1), 17-36.

Taylor Davis is currently an instructional coach in a large urban school district located in Texas. He has worked in public education for 12 years and is a doctoral candidate in the Department of Learning Technologies at the University of North Texas. His recent research into teacher and ESL student self-

efficacy with educational technology was presented at the 2021 and 2022 Association for Advancement of Computing Education SITE conference. Taylor's future projects include the study of English language learners' perceptions of computers as learning devices.

Geneva Tesh is a professor in the Intensive English Program at Houston Community College and a doctoral candidate in the Department of Learning Technologies at the University of North Texas. She is a writer for several Pearson ELT series, including the *Azar-Hagen Grammar Series, Future: English for Results,* and *StartUp.*