

2018

# Parents of At-Risk Students Reluctance to Using Technological Learning Platforms

Michelle J. Landley Lee  
*Walden University*

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# Walden University

College of Education

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Michelle Landley Lee

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2018

Abstract

Parents of At-Risk Students Reluctance to Using Technological Learning Platforms

by

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MA, Walden University, 2007

BS, University of the West Indies, 2001

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Educational Technology

Walden University

2018

## Abstract

Despite school leaders' attempts to implement technology designed to provide resources for parent and student use at home, many parents of at-risk children are reluctant to use the learning platforms. The purpose of this phenomenological study was to describe the meaning of human experiences as they related to parents' reluctance to using learning management systems (LMSs). Elements from Rogers's innovation diffusion theory, Davis's technology acceptance model, and Epstein's parent involvement model were combined for the study's conceptual framework. The research questions addressed the challenges parents encounter with learning platforms; parents' experiences with teachers and schools with regard to training, orientation, and using learning platforms; and parents' feelings about establishing a learning institute to support their LMS use. Six parent participants from a small suburban school district in Southeastern United States who self-disclosed that they used LMS less than 3 times per week and had a child that scored at the beginning level of the mandatory state test were purposefully selected for this study. Data were collected through semistructured interviews and analyzed via Moustakas's modified van Kaam method, which uncovered 4 major themes. The findings indicated that parents avoided using LMSs for several reasons, which included parents' lack of knowledge regarding accessing and using LMSs, ineffective orientation practices, lack of technical support, and lack of support for training. This research contributes to the existing body of literature and advances social change by illuminating parents' challenges with implemented technology. School leaders may use the findings to devise strategic plans to facilitate training programs for parents.

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## Dedication

To my mother, daughter, and sons for their unwavering support and encouragement. I could not have done it without you.

## Acknowledgments

This dissertation has evolved during the long course of my study. I have benefited from the comments, criticisms, encouragement, and help of numerous persons. First, I must say thanks to my heavenly father who has sustained me throughout this journey. A special thanks to my committee members Dr. Heng-Yu Ku, Dr. Asoka Jayasena, and Dr. Shereeza Mohammed for their invaluable feedback and guidance. Thanks to Dr. Paula Dawidowicz for her expertise and advice. A special thanks to my mentor, Dr. Wesley Palmer, who helped me to find valuable research resources and guided me through the dissertation process. A heartfelt thanks to Toni Williams who shared her editing skills and knowledge throughout this process. My sincere gratitude to Igenie Mills for taking on my parental role throughout this journey. Walden University has an incredible depth of research resources to which I had unconstrained access; I am forever grateful. Thank you, Lisa, for reminding me that, "...there is no testament, without a test," when I felt despair. To my coworkers, friends, and family members who consistently encouraged me while I conducted my research and wrote this dissertation, I express my sincere gratitude.

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## Chapter 1: Introduction to the Study

The underperformance of students in core subject areas, such as mathematics and English, is a serious concern for educators in the United States. This concern has led to the implementation of learning platforms designed to bring parents, students, and teachers together in a collaborative learning environment to improve the performance of children; however, some parents are reluctant to use these resources due to technological intimidation (Ponciano, 2014; Blackwell, Lauricella, Wartella, Robb, & Schomburg, 2013; U.S. Department of Education, 2010). The impact of technological intimidation among some parents of elementary school children may contribute to the decline in student performance.

The academic performance of children in U.S. elementary schools decreased in 2015 (National Assessment of Educational Progress [NAEP], 2015) and is a frequent topic of debate among educators and policy makers (Ren & Crick, 2012). U.S. President Barack Obama expressed concern about the low-performance rates in the nation's school system by reporting that countries such as China, Singapore, and Japan have surpassed the United States regarding school performance (U.S. Department of Education, 2010). Hollingworth, Mansaray, Allen, and Rose (2011) reported that parents' reluctance to use school technology might substantially reduce their involvement and initiative in their children's learning process.

Curtiss et al. (2015) suggested that modern school technologies have features that encourage parent participation. The technologies are the results of strategic efforts by school administrators to harness parents' involvement for the academic advancement of

students. However, school officials must understand which factors affect parents' acceptance of school learning management systems (LMSs).

Parents play a significant role in their children's education; therefore, it is important that parents actively engage in their children's learning process (Epstein, 2011; Hoover-Dempsey et al., 2005; Jeynes, 2011; Shiffman, 2011; Unal 2008), which includes school-implemented technology. Researchers have posited that parents are a valuable resource because their home involvement yields the greatest positive impact on students' performance (Altschul, 2011; Vera, Israel, Coyle, Cross, Knight-Lynn, Moallem, Bartucci, & Goldberger, 2012). Parents having the appropriate information might mitigate the risk of children failing in the educational system due to underperformance (Jones & Hinesmon-Mathews (2014).

Smith, Wohlstetter, Kuzin, and Pedro (2011) suggested that if parents were taking advantage of the learning opportunities provided by their children's school, their children would perform at higher educational levels. Parents fully informed of their children's academic progress can motivate and encourage them. In contrast, ill-informed parents are likely to be unaware of their children's academic progress.

I conducted this research to provide insight into the lived experiences of parents who are reluctant to use classroom websites designed for teachers, students, and parents' collaboration as a combined effort to advance students' academic performance. The study may serve to highlight and develop strategies to engage parents who display non-committal attitudes or technological intimidation (see Modimogale & Kroeze, 2009; Ponciano, 2014) by technology implemented for parent participation at their children's



school. Parents' nonparticipation in technological learning platforms has resulted in the nonuse of pertinent information accessible online for children's academic growth.

Poor communication has led to misunderstandings between teachers and parents, which has affected students' education (Hafizi & Papa, 2012; Ponciano, 2014; Zieger & Tan, 2012). School LMSs have the tools necessary to facilitate positive partnerships among teachers, parents, and students. The effective use of technology in schools has potential benefits related to parents' improved ability to monitor homework completion, and students' increased standardized test scores, improved mastery of concepts in the classroom, and increased positive behaviors (Blau & Hameiri, 2010).

Researchers and practitioners have long recognized that parent involvement in education at home can take many forms, including activities such as helping with homework assignments, reinforcing fundamental concepts, continuing school-related discussions, and encouraging students to apply themselves to their school's curriculum (Bowen & Griffin, 2011; Shiffman, 2011). Given the importance of parent involvement in children's education, educators and administrators have implemented communication and interactive programs with useful tools to ensure parents and teachers are fully engaged in the learning process (U.S. Department of Education, 2015d). Despite these efforts, many school leaders have experienced difficulties getting parents to take an active part in school programs and use technological learning platforms (Altschul, 2011; Bowen & Griffin, 2011; LaRocque, Kleiman, & Darling, 2011; Olmstead, 2013; Smith et al., 2011).

The underuse of school technology sometimes results in the unsatisfactory completion of homework assignments and undelivered important school notices.

Demissie and Rorissa (2015) posited that the implementation of a LMS with parental access helps to ensure parents receive valuable information that is likely to be costly through other means of communication, such as agendas, newsletters and other forms of paper correspondence. Furthermore, school leaders' implementation of LMSs can facilitate language translation of valuable information that teachers and school administrators disseminate (Demissie & Rorissa, 2015).

Moreover, school technology can be used to build teacher–parent partnerships and foster students' academic growth (Gutierrez-Carreon, Daradoumis, & Jorba, 2015; Ponciano, 2014; Yu, Brenner, Angel-Jannasch-Pennell, DiGangi, & Kaprolet, 2010; Zieger & Tan, 2012). A key reason for implementing school technology is to provide opportunities for parents to participate in students' learning without being physically present in the schools (R. Rogers & Wright, 2008; Selwyn, Banaji, HadjithomaGarstka, & Clark, 2011; U.S. Department of Education, 2010; Zieger & Tan, 2012); as a result, many school leaders have turned to emerging technology to assist in reaching working parents, hard-to-reach parents, or geographically disadvantaged parents in more convenient ways.

A deeper understanding of the challenges and underlying issues that have contributed to parents' reluctance to using learning platforms is needed to ensure that students are receiving the benefits of these platforms. It is necessary to ascertain parents' perspectives on the factors that may contribute to their participation, and their preferences regarding the effective implementation of elementary school LMSs. My findings may guide administrators and teachers in implementing action plans that address the

underpinning issue and add to the body of knowledge on using LMSs in elementary schools.

In the following section, I provide a description of the scope of the study, which included the background, problem statement, and purpose for conducting the study. It also contained the research questions and the theoretical foundations on which the study is hinged. I conclude by discussing the study's implications for social change.

### **Background of the Study**

Parents' nonuse of classroom websites is an underlying issue because it pertains to at-risk students' academic deficit. Approximately 50% of parents in elementary school do not use school-implemented technology, while 64% of teachers use school technology to publish grades and other vital information (Olmstead, 2013). Parents' reluctance to use technological learning platforms may contribute to some level of student underperformance.

According to the Elementary Education Act (U.S. Department of Education, 2010), school leaders implement parent involvement policies to assist students in meeting local and international standards. *Parent involvement* refers to the interactions of parents with school leaders and students to promote academic success (Hill & Tyson, 2009). According to the Elementary Education Act, parents and teachers should develop partnerships that will improve students' school experiences (U.S. Department of Education, 2015b).

Based on these policies and expectations, administrators have implemented various online learning platforms, with parental access as a means to encourage parental

participation in a convenient and non-threatening manner (Unal, 2008; Zieger & Tan, 2012). The initiative is an effort to improve at-risk students' achievement deficits (Flumerfelt & Green, 2013) using LMSs. The effective implementation of LMS has the potential to foster communication among students, teachers, and parents, and to extend learning at home through parents' assistance (Georgia Department of Education, 2015a; Selwyn et al., 2011).

Researchers and theorists have provided a body of literature that outlines the enormous impact that parents' reluctance to use school technology is having on students' academic performance (Olmstead, 2013). Technological integration has experienced a high degree of failure, if measured by parental involvement (Machado-Casas, Sánchez, and Ek, 2014). Parents' inability to accept technological change in their children's academic learning can have an adverse effect on children's school performance (Hatzigianni & Margetts, 2014).

Parents' indifference to school technological progress is severely affecting the educational experience of children (Gu, Zhu, & Guo, 2013). The emergence of educational technology may be a determinant in children's educational failure. Researchers have examined the factors that influence innovation acceptance concerning users' adaptation and challenges in universities and high school settings. However, there is limited research in the elementary school setting on the challenges parents experience with LMSs adoption, which thus calls for further research.

Zhu (2010) indicated that users of school technology, such as educators, parents, and students, respond to technological implementation based on how the change agent

introduces the technology in the initial phase of adoption. Thus, rejection or adoption of a new program may occur due to poor implementation and orientation. According to Zhu, many parents are not properly oriented regarding their children's schooling and technology.

According to Epstein (2011), school leaders have a responsibility to provide adequate resources that will support parents in delivering meaningful, targeted, curriculum-related assistance as they assume their roles as involved partners. School leaders must be aware of the social and personal barriers that might affect parental involvement and must seek to mitigate these challenges by initiating the appropriate support systems. LMSs with parental access are important to educators because they serve as a forum to maximize parents' involvement in their children's academic pursuits (Serianni & Coy, 2014).

Some charter schools have been instrumental in teaching parent's skills and strategies for using technologies, and in teaching them how to access LMSs so that parents can help in supporting at-risk students with homework assignments (Currie-Rubin & Smith., 2011). Some parents with students in charter schools have been successful in using schools' learning platforms to look at report cards, notices about school events, and e-mails sent by their children's teachers (Borup, Graham, & Davies, 2013). Researchers have also found the platforms to be effective for providing learning opportunities and parent-students interaction (Borup, Graham, & Davies, 2013). The successful adaptation of these parents would be an interesting topic for future research.

In many school districts in the United States, educators and school administrators are encouraging parents to access school technological learning platforms to assist students at home. The success of elementary school technology intervention programs depends on the level of acceptance and use by parents (Gu et al., 2013), which indirectly spurs students' academic growth. In my review of the literature, I found that there was a need to understand the challenges experienced by parents—specifically, those with children considered at risk of academic failure with LMSs. Specifically, I found that there was a need to understand how orientation and training influenced parents' decisions about using LMSs, since educators and school administrators are encouraging parents to access school technological learning platforms to assist students at home.

Parental assistance at home has the greatest impact on students' academic learning; consequently, if parents' participation is to increase, then educational practitioners must seek to understand the underlying issues that might be affecting parents' acceptance and use of learning platforms (Altschul, 2011; Olmstead, 2013). By doing so, school leaders might indirectly improve students' performance by providing the support that parents need to assist in the partnership. Parent involvement in school is an ongoing struggle for many teachers and administrators; therefore, a need exists to collaborate with parents to ascertain what they need and what will work for them if they are to achieve successful parent involvement (Bowen & Griffin, 2011; LaRocque et al., 2011). The reluctance toward technology integration forms a barrier in school intervention programs (Gu et al., 2013). The gap I identified in the research was that there was a paucity of literature detailing (a) parents' lived experiences concerning the

challenges, orientation process, and training provision, and (b) how these factors impacted parents' adaptation and use of LMSs, or what they felt about schools providing established learning programs for their support.

### **Problem Statement**

Administrators have implemented various online learning platforms with parental access as a means to encourage parental participation in a convenient and non-threatening manner (Unal, 2008; Zieger & Tan, 2012). The effective implementation of LMS has the potential to foster communication among students, teachers, and parents, and to extend learning at home through parents' assistance (Georgia Department of Education, 2015a; Selwyn et al., 2011). Parents can use online learning technology to keep informed of the school's social activities, access students' records, communicate with teachers and administrators, and retrieve resources to facilitate student learning at home (Bhati, Mercer, Rankin, & Thomas, 2009; Christianakis, 2011; Findik & Ozkan, 2013; Olmstead, 2013).

The problem I addressed in this study was that some parents of at-risk students in one economically diverse school district in southeastern United State were not using school learning management technologies designed to provide access to online resources to increase children's school performance. Although many researchers have studied parent involvement barriers and technology acceptance and use for teachers and students (Stalker, Brunner, Maguire, & Mitchell, 2011; Griffin & Galassi, 2010; Mendez, 2010), little was known about the lived experiences of parents with students at-risk of academic

failure in using LMSs, or about how schools' orientation processes and training provisions impacted parents' reluctance to using LMSs.

### **Purpose of the Study**

The purpose of this qualitative phenomenological study was (a) to describe the lived experiences of parents who have children considered at-risk of academic failure regarding their challenges with using LMSs to help their children, (b) to identify how orientation processes, training, and school support systems might have impacted their decisions to use LMSs, (c) and to ascertain their perceptions on the possibility of establishing a learning institute to accommodate parents' technology training. My intent was to collect and analyze data regarding the lived experiences of parents of at-risk students to understand the "essence of the experiences" (Moustakas, 1994, p. 9) that promoted their discontinued or reluctance to using the online platforms. The phenomenon of parents' reluctant attitude towards technology use was of interest to me because principals and teachers have made significant efforts to encourage parents to participate in technologies designed to monitor students' academic progress (Blau & Hameiri, 2010). Some of the reasons individuals are reluctant to access school technology include poor interfaces, lack of confidence, and lack of orientation (Fathema, Shannon, & Ross, 2015; Watson, Sanders-Lawson, & McNeal, 2012) as it relates to the guidance, introductory activities, and information provided to parents by school leaders.

Policy makers have mandated that parent involvement and technology integration form an integral part of school improvement plans (U.S. Department of Education, 2015d). Several of the reasons cited for this mandate include students' underperformance



on standardized tests, alignment to global competitiveness, and the social and personal benefits derived from school, family, and community (Epstein, 2011). In this study, parents' experiences regarding challenges and other factors that prevented their active participation provided insight into how school leaders could better foster and support parents as partners through technology integration.

### **Research Questions**

Researchers in the field of education have established that parent involvement in their children's learning enhance students' performance (Altschul, 2011). However, an increased in performance, especially with the integration of MLS, demands parents taking active roles in assisting students academically. Many factors can impede this process of parents assisting students at home using MLS. If school leaders do not take into consideration some of the factors that can impede parents' participation when introducing MLS, parents may show reluctance in helping their children at home. Therefore, I designed the following research questions to develop an in-depth understanding of the meaning parents of at-risk students attached to their seemingly reluctant attitudes toward using learning management technology.

Research Question 1: What were the views of parents of at-risk students regarding the challenges they face with using LMSs?

Research Question 2: What were the experiences of parents regarding schools' orientation and training in relation to their decision to use school LMSs designed for parental access?

Research Question 3: How did parents describe their experiences with technology and schools' support in relation to their use of learning platforms designed to assist students at home?

Research Question 4: How did parents feel about establishing a technology learning institute that will provide useful training in classroom technology for parents?

### **Conceptual Framework**

The frameworks pivotal to my research were Davis's (1989) technology acceptance model (TAM), Rogers's (2003) theory of innovation diffusion, and Epstein's (2011) parent involvement model. This study involved an attempt to explore the meaning of parents' reluctance to using learning management technology as part of their involvement in their children's education. According to the TAM, the degree to which an individual uses technology has a direct link to that individual's acceptance of technology (Davis, 1989). Therefore, parents' reluctance to use the implemented technology will have an adverse effect on students' academic growth.

Using the TAM, Fan and Yan (2015) contended that an individual's decisions regarding technology use hinges on factors such as perceived usefulness, perceived ease of use, attitude, and behavioral intentions. Fan and Yan contended that any of these factors could produce a negative response to the acceptance of technology. Researchers have used the TAM framework to generate some insights into reasons parents are reluctant to participate in online learning platforms initiated at their children's school (Pan & Xu, 2013).

In the innovation diffusion theory, Rogers (2003) noted that the decision to avoid an innovation is a process that involves five stages: knowledge, persuasion, decision, implementation, and confirmation. Rogers explained that a person's psychological and social orientation, which include formal education and social status, are predictors of the person's speed in making innovation decisions; however, the manner of individuals' exposure to the innovation and the channel of communication are factors related to innovation decisions. I drew on the innovation diffusion theory because I determined that it might lead to insights into how the diffusion of a LMS affects parents' decisions to use the learning platform.

In her parental involvement theory, Epstein (2011) posited that schools and families have a shared responsibility in socializing and educating students as they grow and develop; therefore, parents should assist children through their involvement in activities designed and supported by the schools. Effective parental involvement programs must include three contextual spheres: school, family, and community (Fan & Yan, 2015; Pan & Xu, 2013). Although these three constructs are contextually different, success can only occur when all three are working synchronously as they overlap and interconnect.

Thus, I used Epstein's (2011) model of parental involvement because I determined that it might lead to an understanding of the issues associated with the expected partnerships among school, family, and community pertaining to LMSs as a parent involvement initiative. Using these three theoretical lenses provided insight into

the expectations and challenges of school leaders and parents in building partnerships that encourage home-based learning, which I discuss in greater detail in Chapter 2.

### **Nature of the Study**

The purpose of this qualitative phenomenological study was (a) to describe the lived experiences of parents who have children considered at-risk of academic failure regarding their challenges with using LMSs to help their children, (b) to identify how orientation processes, training, and school support systems might have impacted their decisions to use LMSs, (c) and to ascertain their perceptions on the possibility of establishing a learning institute to accommodate parents' technology training. Given the nature of study, I decided to use a phenomenological approach. Phenomenological research is suitable for understanding the meaning that individuals consciously attribute to an event, based on their interpretations or descriptions (Reiners, 2012; Pietkiewicz & Smith, 2014).

The phenomenological approach was appropriate because it involved collecting rich information that I used to write a succinct description of the meaning of the experiences of the studied phenomenon rather than engaging in the theoretical testing consistent with quantitative design (Moustakas, 1994; Van Manen, 1990). Quantitative studies include numeric descriptions based on trends or attempts to determine a causal relationship in an experimental study with structured data collection instruments (Creswell, 2007). Quantitative researchers seek to confirm or refute a theory by analyzing data using statistics. Applying a quantitative approach was unsuitable for this research.

In contrast, qualitative research data is not numerical, but instead is comprised of participants' responses in open-ended interviews that include opportunities to describe their experiences in a less restrictive manner. The main tenet of qualitative design is to gather data from the participants' point of view. Researchers can choose from five distinct approaches when conducting qualitative research, but the basis for the decision should be the procedure and purpose of the study (Creswell, 2007).

According to Neelankavil (2007), an exploratory research enables researchers to develop an understanding of participants thought process to gain insight into underlying issues about attitude and perceptions. The premise for this exploratory study was my understanding that a phenomenological approach supersedes basic description and can be used to understand the lived experiences of the studied phenomenon (Moustakas, 1994). This phenomenological study provided an understanding of parents' reluctance to use school technology, as my aim was to gain an understanding based on parents' perspectives regarding why they are reluctant to participate.

The study involved collecting data from a purposeful random sample of six elementary school parents whose children were at risk of academic failure. For the purposes of this study, I defined at-risk of academic failure as a self-disclosed score at the beginning level on the Georgia Milestone Assessment test, and a reported frequency of parent login to the LMS of less than thrice per week. The study involved six semi-structured interviews, along with follow-up interviews to further probe or clarify initial interview data with parents of children in third, fourth, and fifth grades. I selected parents

of children in these grades because mandated standardized tests are given to students at these grade levels.

At the conclusion of the interviews, I uploaded each parent's interview transcript into NVivo for analysis. Using NVivo, I organized the data into meaningful segments, clusters, and headings based on emerging themes and categories, which I used to generate and develop notable statements. I then wrote a detailed summary of the lived experiences of participants' that contributed to their noncommittal responses to using the LMS websites (Creswell, 2007; Taylor & Gibbs, 2010).

### **Definitions**

*At-home learning:* Parents monitoring, guiding, reinforcing, and instructing with learning activities outside of school (Hoover-Dempsey et al., 2005; Bennett-Conroy, 2012).

*At risk:* Students considered to have a greater possibility of future academic failure based on their present academic mastery (McWhirter, McWhirter, McWhirter, & McWhirter, 2012).

*Attitude:* A person's positive or negative feelings attached to performing a particular behavior (Sentosa & Mat, 2012).

*Change agent:* An individual who is responsible for creating prospective users' awareness of the technology, and for providing them an understanding of its functions and the benefits to be derived from it (Rogers, 2003).

*Georgia Milestone Assessment:* A summative assessment used to measure third-through fifth-grade students' mastery of state-adopted content in mathematics, language

arts, science, and social studies to evaluate students' readiness skills and knowledge needed for their next level of learning (Georgia Department of Education, 2015).

*Learning management platforms:* Server-based information and communication technology such as intranet applications and Internet-based platforms that include LMSs, learning platforms, student management systems, learning community management systems, and other websites (Demissie & Rorissa, 2015). I have used these terms interchangeably throughout the study.

*Learning management systems (LMSs):* Generically used to include all electronic learning management systems, including any websites or technology used to keep records, send e-mails, and provide instructions.

*Orientation:* The degree to which an innovation is apparent and visible to a user so that they take ownership of the innovation (Mpofu, Oakland, Ntinda, Maree, & Seeco (2015).

*Parent:* A child's primary caregiver (Schnee & Bose, 2010), which includes the natural parents or legal guardians performing in loco parentis, including individuals such as grandparents, stepparents, aunts, uncles, and foster parents.

*Parent involvement or parent engagement:* Interchangeably used to refer to parents' active interaction in learning activities at all levels of a student's education. This include involvement at home, at school, and in out-of-school functions related to student academic growth (Epstein, 2011).

*Psychosocial factors:* The psychological and social factors that impact an individual interaction in school settings (Oyenuga & Lopez, 2012).

*Technology integration:* The incorporation of technology and technology-based practices into all aspect of teaching and learning situations (Wachira & Keengwe, 2011).

### **Assumptions**

While conducting this research, I made several assumptions regarding issues surrounding the reluctance of parents in accessing and using school learning management application websites to aid at-risk students with their academic work. Specifically, I assumed that:

- Parents were willing to participate in the study.
- Participants' had experience in using technology.
- Participants understood the level of questioning and answered them accurately.
- Participants answered the interview questions openly and honestly.
- The participants interpreted the interview questions similarly.
- The sample size was adequate to gather sufficient data to answer the research questions.

### **Scope and Delimitations**

In this phenomenological study, I explored the meaning of human experiences as they relate to parents' reluctance to use learning management platforms to assist students at home with academic work. Based on the dynamics of this study, I restricted participation to only parents who had access to the Internet and who currently had at least one child considered at-risk of academic failure in the third, fourth, and fifth grade in a one particular suburban school district. Parents of students in other grades were not



eligible because researchers have established that involved parents are more instrumental during students' elementary school years (Hayes, 2011).

I selected participants on a purposive basis to identify the targeted population for this research because some parents were reluctant to participate due to a fear of individual blame (Rogers, 2003) or due to dissatisfaction with school operations (Patel & Stevens, 2010; Selwyn et al., 2011; Tosun & Baris, 2011; Whitmore & Norton-Meier, 2008). The targeted sites were elementary schools in a small suburban school district in the southeastern United States. The study included in-depth, semi-structured, face-to-face interviews with the chosen participants.

Given the scope of the research, limitations pertained to the generalizability of the study because parents' experiences with learning management technology may have differed from other parents' experiences in other geographical regions. Furthermore, because only third, fourth, and fifth grade parents were respondents, the findings cannot be generalized to parents in other school settings even though the findings indicate the essence of the underlying issues regarding some parents' reluctance to embrace technology.

### **Limitations**

The basis of qualitative research is developing an in-depth understanding of individuals' personal experiences or histories regarding a particular phenomenon (Creswell, 2007). There were certain limitations, given the nature of this phenomenological research. Conducting a study in the school system presented significant challenges. I conducted this study in a school district that I had worked in for

many years with the understanding that the teaching and learning situation is a dynamic and changing environment. I made an effort to conduct the study with the highest degree of credibility even though the study included a purposive sampling method, which negatively affected the level of randomness. Parents may have been reluctant to divulge critical information about their experience openly and truthfully. Further, the site I selected and the number of participants I included could pose some limitations on the study.

To address these limitations, I established trustworthiness by ensuring the participants that the data gathered remained in strict confidentiality. I also used triangulation in my analysis and interpretation of the data (Patton, 2002), and provided a rich and detailed report consistent with the data gathered. Lastly, I solicited the assistance of a peer to analyze the data, the manner in which I interpreted the data, and the results I formulated.

### **Ethical Concerns**

I considered several ethical issues when conducting this phenomenological study. These ethical concerns involved protecting the rights and privacy of the participants and conducting the research according to acceptable codes of conduct. To protect the participants' rights, I secured approval from the Walden University Institutional Review Board (IRB) and used an informed consent form for participants. The informed consent form included descriptions of the purpose and nature of the study, the benefits the participants and other stakeholders could possibly derive from participating, risk factors, and confidentiality. As Creswell (2009) has noted, "Deception occurs when participants

understand one purpose, but the researcher has a different purpose in mind” (p. 2126). I thus discussed compensation attached for participating in the study, rights to discontinue the study, and contact information for any concern that the participants had. In addition, I ensured the participants had an opportunity to review the report, ask questions, and make corrections to interpretations that I had formulated. Providing the participants with these necessary details not only built trust and rapport, but also eliminated deception.

### **Significance of the Study**

This research involved exploring issues surrounding the lived experiences of parents that led to their reluctance to use learning management technology to assist students at home with academic work. Parental involvement is an integral part of educating children, and there has been a paradigm shift in government policies to include parents as a valuable resource in education (Center for the Study of Education Policy, 2014). Despite the positive relationship between parental involvement and student achievement (Fan & Yan, 2015), many parents are reluctant to participate in programs initiated by their children’s schools (Mahmood, 2013), especially programs involving emerging technology. Although a large body of literature exists on different aspects of parental involvement and barriers that prevent the successful integration of programs in school, I could not locate any research on the lived experiences of parents who demonstrated a reluctance to use learning management platforms to assist their children with academics at home.

Similarly, school leaders institute many of these programs without understanding what parents need to maximize their participation or what works for them (Bowen &

Griffin, 2011; LaRocque et al., 2011); as a result, there appeared to be a lack of alignment between parent involvement initiatives, parents' needs, and what works best for parents. Therefore, I determined that research was necessary to explore this phenomenon to generate findings that would provide insight on how best to empower parents to assume committed roles as partners in education via technology.

### **Significance to Practice**

The results of this research may be beneficial to educators and school administrators because they could use the result to create action plans that meet the needs of parents wanting to provide assistance and reinforcements at home. There was a need to develop a deeper understanding of what parents need in order to have a commitment to parental involvement efforts (Bowen & Griffin, 2011), especially regarding their technology use, given that the literature has shown that parent use of technology increases students' academic performance (Nasser, Cherif, & Romanowski, 2011; Ponciano, 2014; Selwyn et al., 2011). By studying the underlying problems that influence parents' reluctance to use learning management technology insight on ways to modulate the program so parents have the support necessary to assist in the teaching and learning process, which subsequently enables them to provide the needed home-based support so that students can achieve a higher degree of success (see Shiffman, 2011).

### **Significance to Social Change**

The findings of this study may lead to social change in several ways. First, administrators and teachers could use the findings to identify organizational issues related to implementing and diffusing LMSs, develop action plans that will address or make

adjustments to the present program, or create additional programs, such as parents training institute, in support of increasing parents' acceptance and use. The result might be better systems that lead to parents' acceptance of learning management technology.

Next, administrators and educators could use the findings to target specific support for parents in using learning platforms. For example, professional development could center on how teachers can collaborate with parents more effectively and efficiently. The result would be a stronger partnership between schools and parents.

Additionally, the research findings may provide insights to legislators considering appropriate measures that can assist parents in becoming more involved in the education of their children. Given that technology and parent involvement are both effective means of increasing school performance, legislators must also begin to approach the implementation of technology from parents' perspectives and ensure parents of school-age students are also ready to become involved parents (R. Rogers & Wright, 2008).

In summary, this research has a significant positive social change impact. This study adds to the existing body of knowledge, and its findings may inform school leaders and teachers about how to introduce, communicate, motivate, and support parents to accept and use learning management technology as a valuable tool in developing students' growth and academic achievement.

### **Summary and Transition**

Technology, in the form of learning management platforms, has the potential to facilitate parent involvement from the confines of home; however, parents must have a commitment to its use to maximize its benefits. This study involved an attempt to explore

parents' reluctant use of LMSs to promote student achievement. The reasons for parents' reluctance illuminated ways to empower them.

Chapter 1 consisted of an introduction to the problem, background to the study, problem statement, research questions, theoretical foundation, and the implication for social change. The chapter also included a discussion of limitations to the study and ways to address them. Chapter 2 includes an extensive review of the literature pertaining to parents' involvement initiatives, technology integration in education, technology adoption, innovation diffusion; theories as proposed by Rogers (2003), Davis's (1989) TAM, and Epstein's (2011) model of parent involvement served as the framework for this study.

## Chapter 2: Literature Review

The implementation of technological learning platforms to foster productivity and performance in education has spurred new challenges for administrators and teachers (Fathema et al., 2015). Parents' have shown reluctance to using technological learning platforms (Nasser et al., 2011; R. Rogers & Wright, 2008). Consequently, students are not reaping the benefits possible from these tools and increasing their performance (Blau & Hameiri, 2010). The purpose of this phenomenological study was to examine the meaning of parents' experiences related to their reluctance in using school learning management platforms to monitor students' performance, provide homework supervision and guidance, and communicate with teachers and administrators.

Chapter 2 includes a review of current literature as it pertains to individuals' reluctance in using technological learning platforms as shared partners in the business of education. I reviewed seminal theorists' and researchers' perspectives on factors that affected individuals' reluctance toward technology acceptance and adoption. Furthermore, I provided a general overview concerning parents' involvement in school and at home.

Researchers have attributed individuals' reluctance to use technology to (a) gaps in the adoption and diffusion processes, (b) lack of technology readiness, (c) lack of technological skills, (d) age disparity, (e) lack of adaptability, (f) lack of motivation, (g) family dynamics, and (h) acculturation (Elliot, Hall, & Meng, 2013; Gilly, Celsi, & Schau, 2012; Govender, 2014; Hatzigianni & Margetts, 2014; Holden & Rada, 2011; Nasser et al., 2011; Parasuraman, 2000). In the literature review, I was able to get a

comprehensive view of researchers' findings relating to technology acceptance and adoption; however, the researchers might have missed salient components pertaining to parents of at-risk students, the functions and operations of school systems, and technology use, which might be contributed to parents' reluctant behavior.

This review includes a synthesis of the literature to establish the underlying factors that have led to the reluctant attitude of parents with at-risk children toward using schools' learning management platforms. My aim was to pinpoint the major factors that have contributed to this unique group of parents' nonuse of LMSs to aid at-risk students' academics. I discuss a wide body of research that exists on differing viewpoints and assumptions about parents' involvement in education and the challenges that they face. In the process, I identify a gap in the current literature regarding research on the lived experiences of reluctance to using learning management platforms of parents of at-risk children. Underwriting this review was my intent to establish strategies and action plans that might address their needs and empower parents to become involved technology users.

### **Literature Search Strategy**

The information I collected for the literature review came from various sources, which I accessed via several databases including ERIC, Education Research Complete, ProQuest, Sage Premier, Questia Online Library, and Abu Dhabi Education Council Online Library. Materials used consisted of subject matter closely related to the topic. These searches yielded a considerable volume of results. In an effort to focus the search, specific search terms I used included *technology in education*, *technology and self-*



*efficacy, technology adoption and diffusion, technology resistance, technology and parent involvement, barriers to parent involvement, technology communication, parent involvement and student achievement, online websites, learning management systems, elderly and technology, technology readiness, user readiness, and at-risk students.* The materials I used were relevant, high quality, and reliable because they were from peer-reviewed sources in the field of education. To ensure the literature I used was current, I limited the searches to materials published between 2011 and 2016.

### **Theoretical Foundation**

The use of theory was central in providing the frameworks to explore the phenomenon in this study. Rogers's (2003) innovation diffusion theory, Davis's (1989) TAM, and Epstein's (2011) parents' involvement model formed the basis for my collection, analysis, and reporting of data that emerged pertaining to the lived experiences of parents of at-risk children who are reluctant to use technology platforms to improve their children's academics. Furthermore, these theories provided guidance in formulating the research questions and creating the instrument.

While their concentrations differ, both Rogers (2003) and Davis (1989) are proponents of technology acceptance theories. Rogers has explained how social networking affects individuals' acceptance decisions, and Davis has concentrated on the features of the technology that influence an individual's decisions related to technology acceptance. Epstein's parent involvement model forms the backbone of many schools' parent involvement programs. These three fundamental theories served as my framework

for understanding parents' reluctance to use technology as a parental involvement initiative for their children deemed at risk of academic failure.

### **Theories of Technology Adoption**

According to Govender (2014), the introduction of technology alone cannot determine its adoption or use. Failing to implement technology largely results from individuals' attitudes toward its adoption (Govender, 2014). Teo (2009) indicated that the unavailability of infrastructure in organizations can affect individuals' attitudes toward technology because the usefulness and use of technology are not static constructs.

### **Diffusion of Innovation Theory**

An increase in the implementation of technology to maximize productivity and individuals' performance in organizations has compelled many researchers to study the issues surrounding individuals' decisions to adopt or reject technology. Rogers (2003) theorized that a person's decision to adopt an innovation is a process. The theory of adoption served as my lens to examine the manner in which learning management technology diffusion in the school system affected the level of parent participation in online resources and the attitudes of parents whose children are at risk, thereby leading to an understanding of parents' decision not to use the website.

Many organizational leaders have relied heavily on Rogers's (2003) theory of adoption when introducing innovations into their organizations. Rogers posited that the innovation-decision process is an integral part of any innovation introduced to an individual or organization. According to Rogers, this process involves the way individuals become knowledgeable about an innovation and the channel through which

the individual develops an attitude to accept or reject the innovation based on a confirmation of its usefulness.

The manner in which administrators and educators initially diffuse LMSs to parents can affect parents' likelihood of accepting and using the technology as an integral part of at-risk children's home intervention and support. Rogers (2003) posited that the diffusion of innovation involves five stages that individuals might assume. Table 1 includes examples regarding the application of the five stages in a school setting.

Parents who did not participate by using any of the resources on the learning management platforms could be considered late adopters or laggards based on Rogers's (2003) description of the stages. However, Rogers cautioned that change agents should not rush to attach personal blame to the late adopters but should strive to analyze the source or channel of innovation. For example, when teachers' expectations for parent involvement initiatives are unsuccessful, then they might blame parents individually (Christianakis, 2011; Hafizi & Papa, 2012). Rogers (2003) noted, "The source or channel of innovations might be at fault for not providing more adequate information, for promoting inappropriate innovations, or for failing to contact less educated members of the audience who might need a change agent's help" (pp. 120-121).

Rogers's theory is relevant to the study because educators expect parents to adopt technology and use it to support students' academic growth. Rogers cautioned, "This process consists of a series of choices and actions over time through which an individual or a system evaluates a new idea and decides whether or not to incorporate the innovation

into ongoing practice” (p. 168). The innovation diffusion model is a suitable lens for researching parent involvement relating to using learning management websites to facilitate at-home participation because the model provides a broad perspective on diffusing an innovation and the dynamics of implementation success.

Table 1

*Rogers’ Diffusion Innovation Theory Applied in the School Setting*

Stages	Description of stages	Examples
1	Innovators: Individuals who are technologically savvy and risk-takers who are eager and willing to spearhead the adoption of an innovation	District head of technology Principals
2	Early adopters: Individuals who have a well-grounded knowledge of the innovation and the benefits to derive who will readily embrace and use the innovation	Computer specialists at the school Media specialists
3	Early majority: Individuals who are deliberate in their decision making and willing to adopt	Team leaders Department head teachers
4	Late majority: Individuals who are apprehensive about the innovation and must see evidence of the benefits before adopting the innovation	Parents who are teachers or those related to teachers Parents of special education students
5	Laggards: Individuals who reject innovation ideas and stick to the traditional way of doing things, who usually have limited knowledge of the benefits or value of an innovation	Teachers who lack training and motivation Teachers close to retirement Parents who do not participate in a LMS

**Technology Acceptance Model (TAM)**

Davis (1989) built the TAM on the assumption that individuals’ decisions to accept technology are based on four psychological factors: perceived usefulness, perceived ease of use, attitude toward technology, and intention to use technology (Teo, 2009). According to Davis, perceived usefulness involves an individual’s conscious

belief on whether a specific technology has the potential to increase performance. Based on this explanation, I used perceived usefulness in this study to determine parents' beliefs that learning management technology can improve their at-risk children's performance, and how perceived usefulness had affected their attitude in using it to communicate or provide structured guidance for their children.

Perceived ease of use involves an individual's belief in whether using a specific technology is easy (Bogart & Wichadee, 2015). The primary argument proposed in the TAM is that both perceived usefulness and perceived ease of use have direct links to an individual's attitude toward using an innovation. These arguments are pivotal in understanding parents' reluctance toward using LMSs, which may be an integral part of their at-risk children's academic development.

Davis (1989) posited that the basis for adopting or rejecting an innovation involves two fundamental determinants: perceived ease of use and perceived usefulness. According to Tarhini, Scott, Sharma, and Abbasi (2015), individuals who find a specific technology difficult to use will base their use on that construct rather than the benefits derived (perceived usefulness). In contrast, Gilly et al. (2012) found that individuals are *satisficing*, in that they will seek ways around the obstacles or difficulties encountered by relying on other competent sources, and their level of optimism toward technology will dictate continued use.

The effectiveness of TAM as an explanatory model for evaluating individuals' intention to accept or use technology has come under scrutiny by some researchers. These researchers have assumed that other factors such as technology complexity, computer

self-efficacy, and organizational orientation are relevant factors that affect adaptation and use of technology resources, such as learning platforms (Teo, 2010). Other demographic factors such as age and sex also affect the adoption process (Gilly et al., 2012; Jelfs & Richardson, 2013; McMurtrey, Downey, Zeltmann, & McGaughey, 2012). This theory was relevant to my research because both perceived ease of use and perceived usefulness can illuminate the meaning of parents' attitudes about using the LMSs.

### **Parent Involvement Model**

Parents are a valuable variable in the equation for students' academic achievement and overall development (Bowen & Griffin, 2011; Hoover-Dempsey et al., 2005; Ponciano, 2011; Selwyn et al., 2011). As a result, educational researchers have proposed frameworks that conceptualize what constitutes successful parent involvement initiatives about teachers, administrators, students, and parents' roles. Given these frameworks by seminal theorists such as Epstein (2011), many school leaders have adopted the outline set forth for efficient and effective parent involvement initiatives (Smith et al., 2011).

Epstein (2011) posited that to maximize children's education, the three overlapping spheres of family, school, and community must be present and working synchronously. The reluctant attitude of any of the individuals within these spheres could be detrimental to students developing their full potential. She further postulated that parent involvement encompasses six types of involvement, which are parenting, communicating, volunteering, learning at home, decision-making, and collaborating with communities.

*Parenting:* Parenting involves educators assisting parents in establishing environments at home that are conducive to effective child rearing and parenting. School leaders can provide this service by developing programs that promote training for parents in ways that will enhance their children's home life, health, social conditions, and overall well-being. Technology can facilitate this type of engagement through online workshops, videos, and other forms of electronic communications (Smith et al., 2011); however, the challenge for educators is getting parents to adopt and accept this mode of communication.

*Communicating:* According to this type of involvement, the onus is on school leaders to design and implement effective means of communications that have the potential of building relationships with parents and teachers and monitoring the progress that children are making in schools. School leaders have implemented various types of communications as an essential part of school improvement plans (Zieger & Tan, 2012). Both traditional and digital forms of communications are visible in schools, which include newsletters, students' progress reports, hard copy letters, online grade books, blogs, and learning portals. However, Epstein (2011) cautioned that school leaders must be aware that parents might feel challenged when using these modalities based on their level of reading, as they might not be fluent in the preferred language, might have reading deficits, or might need special accommodations for reading.

*Volunteering:* Volunteering involves soliciting and organizing programs that include parents assisting in activities within the school to build positive school climate amongst parents, administrators, teachers, and students. Epstein (2011) noted that through

this construct, parents could develop a sense of camaraderie and raise their level of confidence and share their talents in meeting school goals.

*Learning at home:* Learning at home enhances students' confidence as self-learners, builds skills that have a direct link to curriculum and improved test scores, and illuminates the value of shared responsibility between parents and teachers (Tas, Vural-Sungur, & Oztekin, 2014). Furthermore, when at-home activities that are curriculum-related involve parents, the parents are better able to offer their assistance, as they are aware of the expectations for homework and other assignments (Zieger & Tan, 2012).

*Decision making:* Decision making includes parents taking active roles in decision-making at the school. By participating in governance roles, parents will develop a sense of ownership in the schools' initiative, advocate for their children's education, and participate in decisions that affect school policies and overall improvement (Smith et al., 2011).

*Collaborating:* Collaborating involves school administrators and teachers implementing programs that capitalize on community resources that will assist parents in increasing their skill set, so they are better able to provide support to children. Parents' collaboration will foster an awareness of programs and opportunities that can benefit students' learning experiences outside of school.

I included this framework as it was suitable for formulating the interview questions and for providing a rationale for implementing learning management technology in schools. These three theories are relevant to the research questions proposed in this research, as they might illuminate some of the challenges in schools'



orientation and diffusion of LMSs, parents' reluctance in adopting and using technology, and how teachers and school leaders can successfully meet the needs of parents in using LMSs.

### **Literature Review**

A qualitative study embedded in a phenomenological framework involves a review of a substantive range of relevant literature to gather insights from various theoretical notions on schools' technological LMSs strategically designed to increase parental involvement in children's daily school activities (Selwyn et al., 2011).

Accordingly, parents' reluctance to use technology is due to several constructs such as, their lack of understanding schools' learning management websites, the impact of schools' orientation of technology, their poor technological skills, their preference for traditional methods of communication, demographic factors such as age and sex, lack of motivation, and the presence of psychosocial factors. Similarly, parents' reluctance to adopt schools' technology may be due to significant shortcomings in the initial implementation and orientation processes of the schools' LMS programs.

### **Parent Involvement and Technology**

According to Goals 2000: Educate America Act of 1994, school leaders must enhance parental involvement for students' increased performance, especially for minority students with a lower socioeconomic background. One of the objectives of the act stated, "Every school will actively engage parents and families in a partnership which supports the academic work of children at home and shared educational decision making at school" (U.S. Department of Education, 2015d). As a result of this Act and with

Epstein's (2011) parental involvement model as a guide, integrated technology has become a pertinent part of school improvement plans, as supported by Tosun and Baris (2011), who posited that using technology is the "most effective factor in school improvement" (p. 224).

Technology has the potential of serving multiple purposes and is beneficial in creating an environment for parents to collaborate with teachers to foster students' academic success (Blau & Hameiri, 2010; Nasser et al., 2011). Furthermore, Olmstead (2013), and Liu, Black, Algina, Cavanaugh, and Dawson (2010) posited that technology can improve the current situation that many school leaders encounter in building partnerships, as technology has the potential to serve busy parents, parents in remote places, or parents physically unable to visit school sites for one reason or another. Many technological interfaces such as LMSs (Moodle, Canvas, ATutor, Webwork, etc.) have become popular in education (Fathema et al., 2015).

The task of communicating with parents is difficult and time-consuming, but through technological advancement, teachers have choices of how to keep parents involved in a more convenient manner (Curtiss et al., 2015; Lwoga, 2014; Tosun and Baris, 2011). Many school leaders have relied on technology to keep parents informed about the everyday activities of the school, and to provide curriculum-related resources at parents and students' disposal, especially in the form of online learning websites (Selwyn et al., 2011). Online learning websites fulfill school requirements of using technology and providing pedagogical opportunities in an efficient manner (Rotem & Oster-Levinz, 2007).

In a study on parents' perspective of the benefits of classroom websites, Unal (2008) reported that 94% of parents indicated that classroom website implementation was beneficial. Online websites have the potential to encourage and facilitate home-based parent involvement (Curtiss et al., 2015). Such participation includes assisting students with homework, reading to students, and providing opportunities for parent–student communication about school (Hornby & Lafaele, 2011; Selwyn et al., 2011; Unal, 2008).

Pakter and Chen (2013) conducted a study to investigate the use of text messaging as a communication tool for parents and teachers and its impact on at-risk student achievement in an urban high school in Northern California. The result indicated that there was no significant increase in performance among students whose parents received frequent text messages; however, an implication of the study was that the implementation of technology within a school must occur school-wide and not single-handedly if the program is to be successful. Although both the sample size and setting of the research restricted the generalizability, a key realization is that, when educators diffuse parent involvement initiatives that parents are cognizant that it is a concerted effort aimed at building relationships and improving student achievement.

Zieger and Tan (2012) attempted to determine if electronic means of communication would increase parents' involvement, and if so, what caused the increase. The results indicated that 35% of the parent participants did not log into the system daily or weekly, although 98% reported they were aware of the online grade book system. A common reason stated for nonparticipation was that parents leveraged a level of trust in their children and did not believe it was necessary to keep track of their grades.

Also, 73% of the parents who communicated with the teacher did so in response to poor grades given to students (Zieger & Tan, 2012). Data from the study indicated that the participants perceived that the online grade book was an effective form of communication. Most parents were not aware of some features available to them.

While this research results presented reasons for parents' reluctance in participation, the study was limited to a single site, which limited the generalization of the study. Additionally, lack of demographic data concerning the caliber of students was a missing component, which might have shed some light on parents' willingness to trust their children to work independently of their supervision. This study calls for a deeper understanding of how parents confidence and willingness to leverage autonomy to children impact parents' involvement initiatives in schools.

### **Lack of Understanding of Schools Learning Management Websites**

School administrators have introduced several learning management platforms, including Moodle and Blackboard. The Blackboard learning system is a relatively new instructional tool in elementary school systems, and many parents are not familiar with this form of instructional technology. As a LMS, Blackboard is suitable for interactions between school officials, students, and parents (Gautreau, 2011; Wichadee, 2014). A learning management platform refers to online intranets or managed learning environments that school leaders use for keeping records such as grades, attendance, disciplinary actions, homework, classroom instructional resources, curriculum practices, notices, and other vital communications (Cavus, 2013).

School administrators may use learning management platforms to support teachers and students in the teaching and learning process and to inform parents of their children's progress and school activities (Nasser et al., 2011). Schools' learning management websites accommodate various stakeholders' interaction of pedagogical information through an open-access application, which essentially provides transparency for all stakeholders involved (Blau & Hameiri, 2010). Parents can use schools' online learning platforms to monitor students' performance and progress.

School technology enables parents to communicate with teachers through e-mails, blogs, and chats much faster and more directly. Schools LMSs are significant because they provide tools such as electronic communications, students' assessments, instructional materials, multimedia resources, and grade books that greatly aid the learning process (Gautreau, 2011). Also, LMSs facilitate the achievement of instructional goals in a less traditional environment and extend learning beyond the ambit of school hours through readily available content (Gautreau, 2011; Srichanyachon, 2014).

### **The Impact of School Orientation of Technology**

Learning management technology integration as an instructional tool in education is a progressive step in enhancing learning. The challenges that education systems face include the failure of school officials to provide the orientation of learning management platforms (Shin & Kang, 2015). School Administrators have employed learning management tools in many areas of the education system (Bhati, et al., 2009; Shin & Kang, 2015); however, researchers have recognized that the difficulties that exist concerning their adoption and acceptance are the lack of parental orientation (Lwoga,

2014). Therefore, as school leaders seek to implement learning management technology as an integral part of teaching and learning, there are many factors to consider in its adoption (Srichanyachon, 2014) when it includes parents.

Nasser et al. (2011) conducted a study on the factors that affect students' use of a managed learning environment called LMSK-Net in 37 schools in Qatari independent schools. Students expressed that parents' negative attitude toward technology use, teachers' lack of encouragement in using the website, inconsistency in teachers' emphasis on use, and frustration stemming from technical problems such as loss of work, slow device, learning management platform crashing, and technology timing out after a short period of inactivity influenced their low or limited participation on the learning site.

Nasser et al.'s (2011) findings indicated that a relationship existed between technological knowledge and actual use of the online platform. The more knowledgeable students and parents were about technology, the less likely they were using LMSK-Net, as they opted to peruse more entertaining websites. In contrast, if individuals' technological knowledge were basic, then use was very low. The findings indicated that a correlation existed between parents and students' use of technology.

Parents comprise a large part of online learning at the university level, based on the convenience of being able to attend classes and balance family life simultaneously. Therefore, parents' perspectives and attitudes toward learning platforms at this level are crucial in understanding how the perspectives and attitudes might affect adoption by children in K-12 classrooms. Parents' reluctance toward technology adoption has a direct

impact on students' technology use, as the parents are more likely not to embrace a school's implemented technology (Nasser et al., 2011).

Similarly, at a university in Bangkok, Srichanyachon (2014) examined undergraduate students' perceptions and attitudes toward using a LMS in an English course, in comparison to using traditional face-to-face instruction. The results showed that students perceived that using LMS was more convenient than traditional face-to-face instruction, however, face-to-face was more beneficial. Although the participants in the study still received support from their parents, the research is pertinent to the current study, as these students moved on to become parents with reluctant attitudes toward school learning management technology.

Family plays a valuable role in the adoption of any new program within the education system. Blau and Hameiri (2010) examined the interaction of educators in the implementation of a new LMS called Moshov in 10 secondary schools in Israel. The results showed that when administrators oriented parents, and included them in the onset of the innovation, then greater technology integration success was evident versus an implementation that omitted parents in the inclusion and orientation. Blau and Hameiri posited that the inclusion of the family in the learning platform provided motivation for teachers to adopt the learning platform and for consistent participation over the 3-year period of the study, which indicated that individuals' motivation toward technology use could increase if expectations are clear, and all stakeholders "buy" into the program implemented.

Likewise, Shin and Kang (2015) studied online university students' acceptance of mobile learning and its impact on students' learning achievement. The results showed that effort to orient students to access and navigate the mobile website influenced their acceptance and use of technology. Shin and Kang opined that technology orientation influenced individuals' self-efficacy and provided a positive impact directly related to students' perceived ease of use in adopting the technology. Therefore, when school leaders are implementing new or relatively new technology, they should consider how to orient users properly to promote successful implementation.

Teachers' lack of encouragement towards the use of LMSs might influence parents' attitude toward the LMS (Nasser et al., 2011). Furthermore, Tusun and Baris (2011) along with Gu et al. (2013) argued that individuals who fall outside the ambit of new millennium learners find technology adaptation difficult as their social experiences and upbringing place them outside the technology environment, which influence their thought process, behavior, and action. Likewise, parents might be reluctant to accept the use of LMSs due to their technological incompetence and the challenge and fear of learning something new (Azad, Zamani, & Zarifi, 2013; Vance, Carlson, Lively, & Mastracchio Jr, 2013).

### **Resistance to Change**

Introducing an innovation within an organization is a complex process that does not occur immediately; therefore, individuals, such as parents will meet the newness of the innovation with skepticism and resistance to change (Johnson, Wisniewski, Kuhlemeyer, Isaacs, & Krzykowski, 2012; Plessis & Webb, 2012; R. Rogers & Wright,



2008). One of the disadvantages of implementing innovations is that individuals must modify their behavior, skill set, and belief system to accommodate the innovation. This modification may face barriers or reluctant attitudes toward making such an adjustment (Yu et al., 2010).

When the decision making about an innovation lacks involvement by individuals, the individuals are less likely to alter their behavior to accommodate the innovation (Rogers & Wright, 2008). Additionally, for individuals to accept and embrace change, they must have a positive mindset, in that its implementation will be beneficial, and the change will contribute to a higher level of success when compared to the previous idea or innovation. Many parents perceive technology integration as a positive direction for learning (Lin, Liu, & Huang, 2012; Mifsud, Vella, & Camilleri, 2013; Unal, 2008); however, some do not feel convinced that its implementation will provide a higher degree of learning for their children (Hatzigianni & Margetts, 2014).

Srichanyachon (2014) conducted a study using 198 undergraduate students in a foundational English course at a university in Bangkok to ascertain their views, perspectives, and attitudes about using an LMS as an instructional tool. The results indicated that students perceived that using an LMS was convenient, but face-to-face instruction was more beneficial than the LMS for learning English. Although the respondents were students, this research is pertinent to the current research, as the students will eventually become parents, and their attitude, if not changed by some other influences such as extrinsic rewards, might continue to resist the adoption of technology.

## **Technology Readiness**

Resistance to technology might occur due to individuals' trust in the potential of the technology and their confidence in using the technology (Demir & Yurdugül, 2015; Judge, 2013). According to Elliot et al. (2013), technology readiness refers to a state of mind in which individuals have a predisposition to act as enhancers or inhibitors in embracing new technology to accomplish goal-related tasks. Therefore, the implementation of technology does not always foment positive attitude or use, as individuals' comfort and readiness level will directly influence the acceptance or rejection of the technology.

Studies have addressed the importance of technology readiness in education (Judge, 2013). Demir and Yurdugül (2015) summarized various technology readiness models and components for consideration when implementing technology as they pertain to stakeholders' technology competency. Among these components are internet self-efficacy, online learning self-efficacy, self-directed learning, learner's control, and motivation; however, components of technology readiness are dependent on the context and the stakeholders in question.

Educators expect parents to assume active roles as co-educators, especially in virtual environments (Waters & Leong, 2014). However, for technology to be effective and efficient, all stakeholders must possess a level of technology readiness (Demir & Yurdugül, 2015; Soydal, Alir, & Unal, 2011). The technology readiness of parents is important if educators expect them to guide students at home in curriculum-related activities.

With this demand made on parents to participate actively in teaching and learning via technology resources, their technology competency is questionable in determining parents' readiness in assuming co-educator roles or even guiding students (Waters & Leong, 2014). Some parents might not fall under the ambit of students, teachers, or professionals within a learning institution, as indicated by the various models summarized by Demir and Yurdugül (2015). Although research on these stakeholders' technology readiness is ample, parents' readiness to use technology, especially in educational settings, seems to receive little attention. Demir and Yurdugül cautioned that when deciding on individuals' technology readiness, the specific context must receive attention, as each group of stakeholders has a unique set of components not covered by adopting a multiple-layer technology readiness model.

Parasuraman (2000) opined that technology readiness encompassed four dimensions: optimism, innovativeness, discomfort, and insecurity. Optimism and innovativeness are enhancers of technology readiness, and discomfort and insecurities are inhibitors of technology readiness. Essentially, an individual's mindset will act as a determinant based on his or her mentality toward embracing or using technology.

Parents who fall into the optimism group have a positive mindset that technology can provide control, flexibility, and efficiency for students' academic growth; and parents within the innovativeness mindset have the natural inclination to experiment with new technology and to advance as leaders to other parents. In contrast, parents in the discomfort category believe that technology entails an absence of control and feel

overwhelmed by its use, and those in the insecurity dimension do not trust technology and are skeptical of the benefits that their children will gain from its use.

Gilly et al. (2012) conducted a study that showed that if individuals are not comfortable using technology, they develop a reluctant attitude toward its adoption, especially if they perceive that the effort needed to interact with the technology is not worth the benefit. Furthermore, Gilly et al.'s findings indicated that when individuals perceive their initial attempt at using technology as challenging, they might become frustrated and resort to a traditional medium within their comfort zone. Although Gilly et al. studied older adults' adoption of Internet use, the study is significant to this study, as children are often in the care of grandparents with the expectation that they will carry out the duties and roles of the parents in their absence due to work schedules and other life demands.

The mixed method design and sample size employed by Gilly et al., substantiated the research findings, therefore enhancing generalizability. Detailed analysis of the data revealed that a relationship exists between curiosity and optimism to adopt the technology. For instance, the more curiosity experienced by participants, the greater the level of optimism and initial usage. However, Gilly et al. warned that situational constructs, such as availability of classes and peer pressure might have contributed to the level of curiosity experienced; therefore, further research could explore this possibility and how it might apply to parents' adoption of technology.

## **Technology and the Elderly**

Technology resistance is more apparent in seniors (Gilly et al., 2012), as older individuals age 65 and older are less likely to adopt technology readily (Gilly et al., 2012; McMurtrey et al., 2012). Older individuals react differently to technology than younger individuals (Jelfs & Richardson, 2013). First, older adults' attitudes toward technology occur at a slower rate, which can contribute to their late adoption or non-adoption (Gilly et al., 2012). Second, older adults are more likely than younger adults are to admit openly their reluctance to integrate or their low level of technology integration in their daily lives (Jelfs & Richardson, 2013). Older adults' behaviors toward technology use are integral, as they might relate to some resistance encountered in schools when implementing technology as a means of communicating with parents or caregivers and getting them involved in online platform activities for children.

Older adults are less likely to communicate via Internet communications, such as blogs and social networking (Jelfs & Richardson, 2013), which are features of the LMSs used in many K-12 learning institutions (Nasser et al., 2011). Older adults who harbor negative attitudes toward technology use are less likely to become adopters; furthermore, low levels of optimism and proactive coping skills are predictors of the unlikelihood of continuing to use technology after having some exposure to it (Gilly et al., 2012). The level of optimism concerning technology use determines its adoption and continuity of use.

The confidence level of older adults directly relates to their decision to adopt or reject an innovation (Elliot et al., 2013; Jelfs et al., 2013; McMurtrey et al., 2012).

Additionally, conflicting values, beliefs, and personalities of older adults can also act as inhibitors to technology use, which could be perceived as reluctant behavior (Gilly et al., 2012) and could affect the level of parent involvement pertaining to communicating, accessing, and using technology to increase students' performance. Older adults face greater mental challenges compared to younger adults in acquiring essential technology skills based on their inability to learn, recall, or perform the skills needed to be effective with technology use (Gilly et al., 2012). Seniors mental incapability in using technology seems to support researchers such as Prensky (2012) and McMurtrey et al. (2012), who theorized that younger adults such as digital natives learn and use technology with minimal training or coercion because there is a physical difference in the brain's makeup compared to older adults.

### **Motivation and Technology**

Psychosocial factors are a leading cause of technology resistance and for the slow pace at which individuals use technology in education (Yu et al., 2010). Psychosocial factors refer to lack of social control, lack of motivation, feelings of intimidation, and lack of environmental support (Metz, Kelly, & Gore, 2015) that a person might encounter in using technology. According to Nasser et al. (2011), parents are reluctant to accept the use of educational LMS as there is mistrust in the level of control they have as parents, on students' exposure to the content on the Internet.

Autio, Hietanoro, and Ruismaki (2011) contended that individuals' academic value and career choices could lead to a lack of motivation in using technology; therefore, if individuals do not perceive technology as an integral part of their career or

value system, then motivation toward its use decreases over time. They further concluded that personal autonomy contributes to a greater level of motivation. When individuals have freedom of choice, then motivation increases (Housand & Housand, 2012). An individual's immediate home environment is a predictor of technology use (Autio et al., 2011).

Govender (2014) posited that individuals' skills, knowledge, and attitudes are pivotal in their use of technology, as they form the basis for the overall motivation to use it. Parents who have skills and are knowledgeable about technology are more likely to embrace its use and interact more readily with students learning through technology integration. Furthermore, Autio et al. (2011) and Holland and Piper (2014) noted that individuals' motivation toward technology use increase when the level of interest in technology are high, or they have used technology for a period, which promoted confidence and intrinsic motivations.

### **Poor Technological Skills of Parents**

Researchers have recognized the significance of parents' role in students' social, academic, and behavioral development in schools (Watson et al., 2012). For instance, parent involvement was an issue as far back as Dewey (1938), who posited that a need exists for parents' involvement in educating their children. Educators and policy makers realize that parents are a valued component in the development of students' education (U.S. Department of Education, 2015c), although many parents have poor technological skills.

Education has undergone a paradigm shift in the expectations of both parents and teachers (Selwyn et al., 2011). An illustration of this shift is evident in the policies and reforms that have emerged in education over the years. During the 17th century, parents had the responsibility of educating their children; parents taught children survival skills related to culture, geographic location, standard practices, and way of life (Hafizi & Papa, 2012; Hiatt, 1994; Watson et al., 2012).

Consequently, the focus of many teachings was skills that would attract monetary gains and consisted of manual labor; however, the government halted this standard practice under the child labor law and mandated that children receive a formal education. As parents' roles changed, there became a noticeable reliance on teachers to prepare students to take on the challenges of the workforce (Hafizi & Papa, 2012). However, a collaboration between home and school was essential to maximize students' academic, social, and behavioral development (Hafizi & Papa, 2012; O'Sullivan, Chen, & Fish, 2014).

Educators have long recognized the importance of parent involvement and have implemented programs to foster and enhance parents as an integral part of the teaching and learning process (U.S. Department of Education, 2015b); however, many parents cannot take advantage of these programs because of the technological features involved. Machado-Casas, Sánchez, and Ek (2014) posited that parents' lack of technological skills stemmed from the division of individuals with access and those without access to technology. An increased reliance on technology in schools has further marginalized



parents and the level of participation in school programs, as engagement centers on technology use, which requires at least basic technology skills.

An expectation in education is that parents are technologically ready to embrace the use of technology with their children; however, the levels of computer competency and previous computer training are strong predictors of its adoption (Yu et al., 2010). Parents' lack of technical skills in using a learning management platform is a direct result of its inevitable failure in education (Nasser et al., 2011). If stakeholders are proficient in using online technology effectively in schools, then they will be more likely to make it a significant part of teaching and learning, which will emerge from their educational goals and achievements. Nasser et al. (2011) cautioned that basic technological skills alone are insufficient for the effective use of learning management platforms, as individuals must also learn "computer language and culture" (p. 55).

Additionally, parent involvement encompasses many strands and can take various forms, including school activities such as volunteering, attending Parent Teacher Organization (PTO) meetings and conferences, or home engagements such as homework monitoring, concept reinforcement, discussions on school-related matters, and practicing real-world application based on curriculum (Bowen & Griffin, 2011). Although some school leaders might struggle with parents' attendance at social activities, others might experience difficulties in other levels of participation due to poor technological skills (Altschul, 2011; Bowen & Griffin, 2011; LaRocque et al., 2011; Olmstead, 2013; Smith et al., 2011). For example, parents embrace events linked to students' social development, such as parent nights, Halloween festivals, grandparent nights, and father

and daughter dances, more readily than programs directly related to students' academic achievement, such as teachers' conferences, homework assistants, concept reinforcements, or standardized testing preparations.

Machado-Casas et al. (2014) conducted a study to examine the manner in which Latino parents and family members bridge the gap of lacking technological skills and a cultural divide by attending a digital literacy program in a South Texas city. The result showed that parents felt motivated to acquire basic to advanced technical skills so that they could effectively assist in their children's learning, as instructional technology was a part of their children's daily learning. The result indicated that, although parents may have an interest in assisting with the school's online platform as engaged parents, the lack of technological skills might affect parents' involvement at their children's school.

### **Barriers to Technology Adoption**

Many barriers affect the successful implementation of technology in education. Laferrier, Hamel, and Searson (2013) posited that barriers are challenges that leaders of educational institutions must overcome to meet goals. For instance, an association exists amongst the absence of shared vision, unmotivated school officials, lack of implementation planning, inconsistent and inadequate funding, inequitable access, unskilled stakeholders, lack of professional training, technical difficulties, unengaged communities partnership, lack of emphasis on student-centered learning and assessments, and other unsupported external activities and barriers at the school level (International Society for Technology in Education, 2015).

Parents who have students considered at-risk and want to assist their children may find this a challenge due to barriers associated with technology integration. These barriers include first-order barriers or second-order barriers. First-order barriers are resource-related, such as lack of equipment, system quality, and support, whereas second-order barriers are personal inhibitions that create barriers, such as beliefs and attitudes toward technology use and openness to change (Wachira & Keengwe, 2011).

Researchers have concluded that resistance to change, negative attitude toward technology, lack of training and support, and lack of knowledge of the benefits of technology have a direct link to individuals' second-order barriers (Ertmer & Ottenbreit-leftwich, 2014). However, Ponciano (2014) suggested that parents' ambivalence about participation might stem from physical, emotional, and intellectual potential, rather than the mere presence of technology; for example, the expectation for parents to become involved in their children's learning (Selwyn et al., 2011) may create a barrier, as parents must change or adjust their lifestyles to fulfill the expectation. Salleh and Laxman (2015) noted that when individuals must change their practices, the associated pressure might elicit negative attitudes toward technology and their perception of its benefits.

Change in family dynamics may also create barriers (Huffman, 2014). Family household dynamics have changed due to economic hardship, which produced additional strain; as parents feel stressed for the time in securing provisions for their household and find it difficult to assist with students' academics (Ponciano, 2014; Smith et al., 2011). Researchers at the U.S. Census Bureau (2015) reported that 77.8% of single parents with

school age children have a job. Thus, parents in one-parent homes might face challenges pertaining to lack of time to use the technology provided by the schools to assist students.

Additionally, many parents must make decisions on child-care arrangements for their school-age children as they venture into the workforce (Laughlin, 2013). According to the U.S. Census Bureau, grandparents care for approximately 24% of school-age children while parents work. A generational gap exists pertaining to technology acceptance and use in older individuals referred to as the digitally divided, which may present a barrier for school leaders who want to implement technology for students to use as part of their ongoing learning.

Similarly, teachers' indifference to technology might indirectly create barriers for other potential users, such as parents (Nasser et.al, 2011). For instance, Mulhim (2014) posited that teachers have barriers based on their attitude, resistance to change, lack of confidence, and lack of skills and knowledge. These attitudinal barriers indicated that if teachers are not entirely embracing the integration of technology, then parents may not feel empowered to adopt its use as a pertinent component in students learning. Some researchers have also theorized that time constraints are a barrier to the successful integration of technology.

### **Students At-risk**

Researchers in the field of education have conducted a plethora of research on at-risk students and the factors that have influenced their achievement level (Simoes, 2014). Each year educational institutions are challenged by the alarming number of pupils identified as at-risk students and its impact on students' being college and career ready.

Ohrman and Preston (2014) argued that approximately, one-fourth of public school pupils in the United States are at-risk, and do not graduate or finish high school at the appropriate time due to the factors that impact academic process. Extant literature indicated that there is no single definition that can describe at-risk students, as categories are formed based on situations or circumstances. For instance, students are labeled at-risk based on school-related factors, family dynamics, or students own personal attitude toward schools' expectations, which is solidified by the U.S. Department of Education (2016a), which posited that an at-risk student refers to:

Students at risk of educational failure or otherwise in need of special assistance and support, such as students who are living in poverty, who attend high-minority schools (as defined in the Race to the Top application), who are far below grade level, who have left school before receiving a regular high school diploma, who are at risk of not graduating with a diploma on time, who are homeless, who are in foster care, who have been incarcerated, who have disabilities, or who are English learners (p.1).

Other researchers argued that there are still other indicators involved when referring to students at-risk (Huffman, 2013). According to Trolan (2014) at-risk students are students who live in single-family household and students who are associated or connected with family members who have dropped out of school. This argument is significant to the proposed study as family members might be reluctant to participate in schools' technology initiative based on their experiences in school (Selwyn, et al., 2011).

Researchers have identified various factors that contribute to the present dilemma of students falling behind, academically. These factors can be grouped into three broad categories, which are, family and community factors (Cutuli, Desjardins, Herbers, Long, Heistad, Chan, & Masten, 2013; Somers, Chiodo, Yoon, Ratner, Barton, & Delaney-Black, 2011), school-related factors (Jovanovic, Simic, & Rajovic, 2014; Lewis, Whiteside, & Dikkers,), and personal factors (Hutchinson, 2015; Matheson 2015; McGhie & Preez, 2015). The impact of these factors is dependent on students' resilience, intervention systems implemented, and support offered to this population (Cutuli et al., 2013).

Students who experience academic difficulties in K-12 school settings, if not given adequate support will continue to struggle in the post-secondary setting and are more likely not to acquire a college education (Orthman & Preston, 2014) or enter the workforce. This notion is interesting as legislators have restructured schools' expectations mandating that students demonstrate college and career readiness upon high school completion. Although school completion is a long-term goal for elementary students, foundational preparation is pivotal. Research indicated that a combination of positive high-impact practices (such as technology integration), positive interactions and parental involvement could positively influence at-risk students' achievement level.

The findings of a study conducted by Fuchs, Fuchs, Crompton, Wehby, Schumacher, Gersten, and Jordan (2015) indicated that students who experience academic difficulty when given specialized or individualized intervention performance exceed students in regular education classrooms. This result suggested that students at-

risk need additional or supplemental intervention outside the normal classroom activities. Fuchs et al., (2015) argued that the gap that exists between at-risk students and their counterparts will continue to widen without intervention. Therefore, students at-risk must be given opportunities, not only to keep up but to learn much more, so as to achieve as much as their not-at-risk counterparts. These study findings are pertinent to the proposed study as technology has the potential to provide personalized instructions and intensify the intervention outside the realm of the classroom (Fenty, Mulcahy, & Washburn, 2015); however, both students and parents must be willing to take advantage of its benefits. However, caution must be taken when accessing this result as students were exposed to only the concept of a fraction in mathematics. Therefore, the result of this study cannot be generalized to other core disciplines or domains of mathematics.

Researchers have also examined how proactive interventions, using technology, can assist and support at-risk students' academic performances. Lewis, Whiteside and Dikkers (2014) conducted a mixed method case study that involved K-12 at-risk students, in two different virtual settings, namely, online learning and blended learning, to examine the benefits and challenges experienced by at-risk students in using online technology as an integral part of their learning program. The finding suggested that self-pacing was beneficial. However, autonomy and the responsibility attached to time management were barriers experienced by students. The results indicated that at-risk students need structured supervision and monitoring, which parents could provide as partners when the right attitude, behaviors, and activities are undertaken by parents (Cullen, Cullen, Band, Davis, & Lindsay, 2011).

Although Lewis, Whiteside, and Dikkers, (2014) indicated that the study consisted of a demographic mixed of students, a description of the mixed would have shed some light on students' background and how this might have impacted their findings. Darenbourg and Blake (2013) emphasized that African American students performed academically lower than their European American counterparts. Additionally, the study had limitations as to how the researchers identified the sample population and how this might have impacted the findings of the study.

On the other hand, Fenty, Mulcahy, and Washburn (2015) researched whether computer-based fluency instruction was more effective than teacher-led print-based instruction, using fifty at-risk students in third grade as the sample participants. The findings revealed that there were no significant differences in students' achievement in fluency and comprehension skills. However, there was a significant difference in students' attainment level between the timed equivalence and the text format treatment. This disparity may be due to immediacy in the feedback of the timed intervention, which the computerized treatment provided, a missing feature in the text format treatment.

Although researchers differ in their arguments about factors that impact at-risk students, one commonality in their arguments is that this population of pupils, need appropriate support to accelerate their chances of school success (Denton, Taylor, Barth, & Vaughn, 2014). This acceleration could be achieved through specialized intervention or continuous guidance and extended supervision (Fuchs, et al., 2015). Therefore, it is important to understand parents' experiences as to obstacles that are associated with their attitude towards monitoring, supervising and guiding at-risk students, and using



technological platforms to be better able to address the issue at the school, district and state levels.

### **Literature Gap**

The literature review revealed that there was limited understanding of challenges concerning the adoption, rejection, and orientation process that influence parents of at-risk students, reluctance in using LMSs to help their children, academically. Although there is an extant amount of literature on adaptation of LMSs in education for pedagogy and communication in educational institutions, little is known about parents, who have at-risk students, lived experiences and the challenges that they encounter in meeting the expectations of monitoring, supervising, guiding, and communicating with teachers and administrators using this format of technology. Furthermore, there is limited knowledge on specific plans in schools that will reduce parents' reluctance associated with technology or formally train them to meet the expectations of working closely with their children, using LMSs.

### **Summary and Conclusions**

The literature review included an examination of the challenges that affect the successful implementation of technology in the educational arena and wider society. Also included were several constructs that affect technology adoption or rejection. The literature review revealed the importance of parents as partners in education and the positive impact of technology integration in schools; however, integration of technology is a complex process with many challenges.

In the literature review, I indicated that implementing technology in education does not guarantee its use or acceptance because various factors can affect its adoption by different stakeholders. Technology integration failure relates directly to institutional orientation of the technology, lack of technological skills, age, lack of training, and lack of individuals' confidence and motivation. Despite the large pool of technology resources available within the educational system, many stakeholders, including teachers and parents, are lacking the skills and positive mindsets to take advantage of the benefits to gain from their implementation (Ertmer & Ottenbreit-Leftwich, 2014).

Numerous studies exist on the effectiveness of technology integration in school settings and the valuable contributions that parents can make to students' achievement (Evans & Hiatt-Michael, 2015). LMSs have great promise in bridging the gap in providing a medium for partnership among stakeholders, especially teachers, students, and parents. Although a vast amount of research exists on technology adoption and use at the institutional level, few researchers have addressed parents' perspectives on their role to become educationally involved through online resources such as LMSs and the challenges that accompany implementation for parents, especially those with students deemed at-risk of academic failure.

Parents' comfort level with a school, technology, and their children's level of performance can prevent them from participating in the school's technology initiative (Johnsen & Bele, 2013). Principals and teachers might use the findings from this study to improve parents' reluctance so that parents feel equipped with the necessary skills and confidence needed to assist as partners. Chapter 3 will include a description of the

research design, the targeted participants, the procedure for selection, instrumentation, data collection and analysis procedures, and participants' protection and rights.

### Chapter 3: Research Method

The purpose of this qualitative phenomenological study was to (a) describe the lived experiences of parents who have children considered at-risk of academic failure, specifically regarding their challenges with using learning management platforms to monitor, supervise, and guide students with academic help at home; (b) identify how a school's orientation process and training impacted parents' decisions about using LMSs; and (c) gain insight on parents' perceptions of the possibilities of establishing a technology learning institute that will provide useful training in classroom technology for parents who need help understanding it (R. Rogers & Wright, 2008). This approach led me to insights regarding the essence of parents' reluctance to use valuable technological resources designed to advance the learning process of children (Fan & Yan, 2015; Pan & Xu, 2013).

School leaders should invest in technology training for parents because parents who are knowledgeable about classroom technology can be a strong support for teachers while monitoring their children's academic performance (Nasser et al., 2011). Parents might feel encouraged to use classroom technology if they can attend a training institute equipped with the proper staff and technology. The parent technology learning institute would be open to parents, so parents could have the access and support needed to use a classroom technological learning platform.

This study included an exploration of technology integration in education, factors that affected adoption and acceptance of technology, and parent involvement to provide insight into how schools could improve the current level of participation among parents,

especially in the use of learning platforms. Technology integration can generate increased success for all stakeholders in education; however, the basis of its success is user acceptance and use (Yoshizawa, 2014).

An understanding of the lived experiences of parents who have students at-risk of academic failure who do not use the LMS available to them might assist both the U.S. Department of Education policy makers and educators in developing contingency plans that will meet parents' needs. Such an understanding may also be useful in devising school-level action plans that will address parents' preferences and needs based on the social or organizational factors that have influenced their decision not to participate in the initiative provided by the school. Because parents' home involvement is successful in improving students' academics (Altschul, 2011), it is essential for educators to provide effective and efficient tools that parents embrace and accept to increase their involvement.

This chapter includes a description of the research design and rationale, my role as researcher, and the application of the research methods for this study. This chapter also includes discussions of the procedures I chose to collect, analyze, substantiate, ascertain, and disseminate the data. This study involved gathering insights that may provide an understanding of the meaning of the lived experiences of parents' who do not use classroom technology to provide assistance to at-risk students at home.

### **Research Design and Rationale**

This study involved investigating the lived experiences of parents who are reluctant to use classroom technology. In education institutions, there is an expectation

that school leaders will integrate technology such as LMS as an instructional tool to improve students' growth with the help of parents (U.S. Department of Education, 2015e). However, if parents are reluctant to accept and use these technologies, then at-risk students might continue to experience academic failure (Currie-Rubin & Smith 2014). Consequently, there was a need to investigate and develop an understanding of the underlying issues that have led to parents' reluctance to embrace these LMSs.

Parents are the main link between children and teachers. An effective communication system between parents and teachers is important for the learning process (Epstein, 2011). Therefore, it was imperative to understand the lived experiences of parents through a qualitative investigation. In this study, I sought to answer four research questions:

Research Question 1: What were the views of parents of at-risk students regarding the challenges they face with using LMSs?

Research Question 2: What were the experiences of parents regarding schools' orientation and training in relation to their decision to use school LMSs designed for parental access?

Research Question 3: How did parents describe their experiences with technology and schools' support in relation to their use of learning platforms designed to assist students at home?

Research Question 4: How did parents feel about establishing a technology learning institute that will provide useful training in classroom technology for parents?

The epistemological view that served as a guide in this research was that parents of at-risk children have information from their lived experiences that could increase scholarly understanding of some of the nuances experienced by educators in successfully implementing technology to support parent involvement initiatives. Therefore, engaging parents in face-to-face interactions was most suitable for this study. This topic was salient to the phenomenon under study because the subject of technology integration and parent involvement was not a new challenge in education, and educators have continued to prescribe and implement programs that include parent involvement (Fan & Yan, 2015; Pan & Xu, 2013) without understanding the manner in which parents' lived experiences might have affected the adoption or acceptance process.

My intent in this study was to examine the meaning of parents' experiences as they related to the challenges that influenced parents' reluctance in using school learning management platforms to monitor students' performance, provide homework supervision and guidance, and communicate with teachers and administrators in one suburban school district in the United States. According to Creswell (2007), Khan (2014), and Moustakas (1994), a researcher's worldview should guide the approach selected when conducting a study. An individual's worldview refers to "a set of beliefs about fundamental aspects of life that shapes and influences how one perceives, thinks and acts" (Nasir, Yosof, Yusoff, Don, Abdulla, & Baharuddin, 2016, p. 2).

Creswell (2009) and Teddie and Tashakkori (2009) have posited that behavioral and social research are approached from three methodological designs: quantitative, qualitative, and mixed methods. The researcher determines the design according to the

research problem, research questions, and methodology employed in data collection, analysis, and interpretation. I considered using each design for this study.

In quantitative research, a positivist worldview guides the direction of the study (Reiners, 2012). Creswell (2009) explained that positivism relies on empirical data that researchers use to refute or support a theory. In positivist contexts, researchers employ numerical data to quantify the data collection, analysis, and interpretation process. Furthermore, the underlying intent of the quantitative research is to prove or disprove predetermined hypotheses, which predicts causal relationships of phenomenon or problems (Teddie & Tashakkori, 2009). Given my intent in this study, a quantitative approach was not appropriate because my aim was to understand the lived experiences of parents with students at-risk, reluctance towards using online LMSs to monitor, guide, provide assistance to students, and interact with teachers and administrators.

I also considered using a mixed method approach. Teddie and Tashakkori (2009) explained that mixed method research offers an alternate approach in which the researcher has freedom to use any methodological tools necessary to answer the research question. In the initial stage of this research study, a mixed method approach appeared to be suitable as it would have enabled me to employ both qualitative and quantitative aspects. However, after much consideration, I realized that this approach was also unsuitable because the mixed method approach is closely tied to a pragmatic philosophical orientation, which seeks to uncover “truth” based on both quantifiable and narrative measures. In my research, statistical components were not necessary because



my intent was to understand the lived experiences of participants by enabling them to freely “voice” their experiences in informal conversations.

Teddie and Tashakkori (2009) explained that in qualitative studies, researchers employ thematic analysis, which involves identifying themes that emerge in conversations. An effective communication system between parents and teachers is important for the learning process (Epstein, 2011). Therefore, it was imperative to understand the lived experiences of parents through a qualitative investigation. Creswell (2007) explained that qualitative research is suitable when a phenomenon under study is complex and the essence of the problem needs direct interaction with participants so that they can tell their stories freely. Furthermore, qualitative designs provide insight into participants’ lives as they offer meaningful data about why they reacted in a particular manner, the context that affected their actions, and their feelings that governed their reactions (Creswell, 2007; Khan, 2014).

Based on Creswell’s (2007) explanation of research approach in qualitative studies, I considered each qualitative tradition as it pertained to the intent of the study. A discussion followed. A grounded theory design was not suitable because the characteristics of a grounded theory design do not align with the intended research, as my aim was not to generate a theory but to gain an understanding based on the parents’ perspective about the underlying meaning about their reluctance to use LMSs.

Similarly, given the nature of the research, a case study was not appropriate. Case study research design involves the researcher identifying clear cases bounded within a specific system, whereas the intent was to develop an in-depth understanding of a

process, an event, or a problem (Creswell, 2007). Adopting this qualitative design would have changed the focus and intent of the study.

Likewise, an ethnology was not appropriate, as ethnology research involves an attempt to understand “the behavior of a culture-sharing group” (Creswell, 2007, p. 95). In this research, I was not targeting any particular group or culture. The participants were a diverse mix of parents with at-risk students who were not using learning management technology to help students reinforce or complete assignments based on the curriculum.

Khan (2014) and Van Manen (1990) explained that researchers conduct phenomenological studies to examine the different perspectives, experiences, and behaviors of complex issues in a holistic framework. Additionally, phenomenological studies are suitable when there is a need to develop an in-depth understanding based on participants’ account of their beliefs, experiences, convictions, and feelings about a phenomenon (Creswell, 2007; Moustakas, 1994; Van Manen, 1990). A qualitative phenomenological approach was most appropriate for this study. My aim was to provide parents with the opportunity to voice their lived experiences (Khan, 2014) about the personal, social, and school’s organizational challenges that influenced their reluctance toward using the learning website, in one suburban school district in the United States; therefore, capturing the essence or meaning of parents’ behavior. Researchers in such studies place greater emphasis on the participants and on how the phenomenon influenced their actions (Moustakas, 1994).

According to Miles et al. (2014), phenomenological analysis involves examining the themes that emerged from the data to highlight the “essence and essentials” (p.746) of

the meaning participants give based on their experiences. Creswell (2007) noted that phenomenology involved a researcher eschewing any preconceived speculations based on personal experiences and adopting a new perspective based on the phenomenon studied, which Miles, Huberman, and Saldaña (2014) and Moustakas (1994) referred to as bracketing. Essentially, a researcher should approach a study with fresh eyes.

A phenomenological research design was pivotal, as I was able to highlight data that educators can use to become more proactive in implementing technology as a part of school improvement plans. Data collection, data analysis, and describing the findings in a phenomenological study, was a unique process, as the intent was to describe the lived experiences of parents rather than rely on a set of preconceived presuppositions (Creswell, 2007). Furthermore, Creswell (2007) and Moustakas (1994) emphasized that in phenomenological studies, collecting and analyzing data is a systematic process that provides guidelines to assist researchers in producing a structured, comprehensive description of the studied phenomenon. The steps involved are data collection and data analysis.

### **The Role of the Researcher**

My role as a researcher in this qualitative phenomenological study was to select an adequate sample size of parents who have experienced the phenomenon, collect, transcribe, and analyze the data pertinent to the phenomenon, and write a thick and rich description of the essence of the participants' experiences. Maxwell (2013) alluded that interview questions in a qualitative study should have strong and effective strategies that will encourage participants to provide clear and useful data. To accomplish this, I

employed an interview protocol model (Creswell, 2007; Janesick, 2010) that included a carefully drafted introduction that included the purpose of the study, its implication for social change, and all legal and ethical ramifications attached to participation in the study.

Before the collection of data, I sought the cooperation of personnel within the participating school district that parents' at-risk children were attending. This collaboration was not successful as the school district decided that permission would not be granted to conduct the study. The decision was then taken to seek permission from Subdivision Homeowners' Associations that served the children in the schools targeted for the research. I ascertained permission from IRB before speaking to any prospective participants. After gaining IRB approval (09-12-16-0023880), I attended three subdivision Homeowners' Association meetings and made contact with prospective participants, informed parents about the research intent, and their rights as participants. I then purposively selected participants, scheduled the time, date, and location to conduct the interviews.

Creswell (2007) posited, "The qualitative researchers collect data themselves through examining documents, observing behavior, and interviewing participants" (p. 35). Therefore, my role involved conducting a face-to-face semi-structured interview with each participant and using a digital tape recorder to record the interview, which I later transcribed. I also manually took notes of observations made during the interview concerning the lived experiences of the parents. Creswell indicated that observation was a

critical skill for conducting phenomenological studies, as it can be useful in addressing deception by the individuals interviewed.

One consideration before the interviews was to ensure all materials, such as the tape recorder, was working efficiently (Janesick, 2010) as I sought permission from my participants in recording the conversations. The tape recordings served a dual purpose as a backup system in the event of unforeseen incidents that involved the loss of data, and for reviewing or clarifying data at a later date. Recording the interviews provided an opportunity to take notes on participants' spoken words and body language. Also, I noted my reflective thoughts during the interviews, which enabled me to highlight some of the biases that I might have had on the studied phenomenon.

My role as the researcher was to protect the rights of the participants using both moral and ethical standards (Creswell, 2009; Miles et al., 2014; Moustakas, 1994). I ensured that parents were aware of the level of confidentiality offered, of the process used to withhold their identity, and of their rights as participants. Engagement in these ethical and moral standard practices strengthened the degree of trust and relationships the participants had with me as the researcher.

Additionally, I thanked each participant for the time spent participating in the study and provided each participant with a copy of the transcripts to confirm the correctness of the data gathered (Janesick, 2010; Miles et al., 2014). Also, I transcribed and analyzed the data collected based on statements, sentences, and quotes clustered to form themes to gain an understanding of common experiences among participants. I also

wrote a thick and rich, detailed report based on the lived experiences of parents of students at risk regarding their reluctant attitude toward using LMSs.

### **Methodology**

The following section outlined the selection process for participants' selection, instrumentation, the procedure for recruiting the participants, and an exhaustive data analysis plan used for the study. Likewise, the section provided details outlining trustworthiness and ethical issues forecast in conducting the study. The information included was adequately described to enhance replication of the study.

The methods and procedures employed in phenomenological research involved approaching the study in an orderly and systematic manner to ensure that the researcher maintain care and rigor (Moustakas, 1994). The participants in this qualitative phenomenological study were six parents of at-risk students in third, fourth, and fifth grades who had not used the school's LMS to assist students at home. As the intent of the study was to examine the lived experience of parents' reluctance in using online learning resources, data was from a purposeful random sample of parents who had at-risk children in an elementary school in a southeastern suburban school district in the United States.

### **Participant Selection Logic**

The process of selecting the sample size for qualitative studies is complex and deliberate, as researchers must strategically take into account the design employed for the study, the purpose of the study, and the participants needed to provide meaningful data. Creswell (2007) posited, "Decisions need to be made about who or what should be

sampled, what form the sampling will take, and how many people or sites need to be sampled” (p. 125).

The sample size must be adequate to answer the research questions so that an understanding of the phenomenon emerged as the end product. Thus, a researcher should never sacrifice the quality of data for quantity. Maxwell (2013) noted that researchers should focus on depth rather than breath when conducting qualitative research. For example, in a phenomenological study, a small sample size could provide extensive data (depth) that are valuable for the research, rather than using a large sample size (breath) to obtain data that are inadequate for answering the research questions.

Pietkiewicz and Smith (2014) supported the notion of a small sample size by suggesting that six to eight participants are a sufficient sample size for phenomenological researchers to collect data, which forms the premise for the number of participants selected in this study. As a novice researcher, I felt that six participants were a suitable sample size to explicate parents’ experiences since parents with at-risk students might have been unwilling to participate in the study.

Smith, Flowers, and Larkin (2009) posited that three participants are adequate for novice researchers; however, I felt that two participants from each of the three prospective grade levels would provide me with a richer and more comprehensive data for analysis. A sample size of six participants was adequate in providing relevant and depth of data to answer the research questions (Pietkiewicz & Smith, 2014). The sample size was justified based on participants’ availability, compliance, and quality assurance in the data analysis process.

A narrow group of potential participants existed, as parents of at-risk students might have been reluctant in participating in the study, due to the low performance of their children. Consequently, if the number of parents for the study were not attainable for the interviews, consideration would have been given to recruit parents that had students who are borderline in performance, that have also demonstrated a reluctance to use the LMS. Borderline students referred to those students that have passed the Milestone Assessment Tests with less than five points away from the failing score. Although these parents were not the focus of this study, these parents could have provided insight and meaning to their reluctance in using LMSs.

In this phenomenological study on the lived experiences of parents of at-risk students who are reluctant to use learning management technology to assist their children at home with academic work, I applied both purposeful and heterogeneous variation sampling. Patton (2002) noted that strategies used in the selection process for qualitative studies are not mutually exclusive; consequently, I used both heterogeneous variation sampling and purposeful sampling to ensure parents had different backgrounds regarding their demographic makeup so that a diverse representation of the population was present.

In my initial selection process, I selected 6 participants from a larger group of 8 participants identified by parent's self-disclosure that their children performed at the beginning level of the Georgia Milestone Assessment Test and that they used the school implemented LMS less than three times per week. Patton (2002) posited that purposeful random sampling involves selecting participants from a group of prospective participants. These participants represented a diverse group of parents, and (a) had a child in the third,



fourth, or fifth grade labeled at-risk of academic failure, (b) have access to the internet, and (c) have visited the online platform website less than three times each week since its introduction for the academic school year.

Additionally, I purposefully selected the participants to include two parents from each of the three subdivisions targeted; which also included two parents representing Grade 3, two representing Grade 4, and two representing Grade 5, as these are the grades in which students took criterion reference tests, in elementary schools, and labeled at-risk. This selection resulted in six participants for the study living in three subdivisions within the school district. By including this sampling strategy within this small sample, I was able to describe the underlying issues related to parents' participation as it pertained to their reluctant attitude toward using LMSs. Also, I considered the age group of the participants in this research, as I felt that the age of the participants might further provide an understanding of the studied phenomenon.

Elliott and Timulak (2005) posited that qualitative study aim is to select participants that can provide in-depth data that capture the studied phenomenon. Furthermore, Groenewald (2004) reiterated that the basis of phenomenological study is to understand the phenomenon as described by the participants, allowing the essence of the lived experiences to become visible. Based on these arguments, purposive sampling was employed to understand parents with at-risk students' experiences that contributed to their reluctance toward LMSs.

Since the intent of the study was not to generalize the findings but rather to highlight the meaning of the lived experiences that might have affected parents'

reluctance to use school websites, this sample size was sufficient to provide the study outcome. Creswell (2007) emphasized that qualitative studies are not suitable for forming generalizations but are instead suitable for elucidating specific details of a participant's story. Furthermore, the sample size of six participants led to a more comprehensive analysis of the experiences of these parents.

In the interest of time, expenses that the research incurred, and being a novice researcher, it was appropriate to focus on a small sample size. Having a small sample size eliminated the possibility of sacrificing the rich information ascertained if the group of participants was to be larger (Miles et al., 2014; Smith, Flowers & Larkin, 2009), due to a lack of resources or time constraints. Patton (1990) posited that the size of qualitative research is subject to the why and what the researcher wants to explore, and how to use the information and the availability of resources to cover costs incurred.

Given the purpose of the research, which was to explore the meaning of the lived experiences of parents' reluctant attitude toward using LMSs, I predetermined the site or location for the study. The participants' children attended school in a small southeastern suburban school district in the United States. Creswell (2007) posited, "The concept of purposeful sampling is used in qualitative research, which means that the inquirer selects individuals and site for study because they can purposefully inform an in-depth understanding of the research problem and central phenomenon" (p. 125).

### **Instrumentation**

An in-depth semi-structured interview instrument, consisting of open-ended questions based on the research questions (Moustakas, 1994) was suitable for conducting

this phenomenological study. Semi-structured interviews ensured maximum flexibility in capturing the experiences, feelings, convictions, and beliefs of the participants (Patton, 2002), regarding their reluctance in using the LMS to help their at-risk students with academic work at home. Patton (2002) posited that the intent of an interview guide serves to focus and guide a spontaneous conversational interview.

Also, I employed a follow-up interview to clarify each participant's response via Skype or telephone based on the participants' preference. Using a digital tape recorder, I recorded the informal conversations and took notes based on my observations and thought process (Janesick, 2010). The face-to-face interviews served as an opportunity for me to develop a rapport with the interviewees and facilitated the digital recording of the interview sessions, which provided a backup system for reviewing or clarifying data. Furthermore, in a face-to-face interview, I had the advantage of noting both verbal and nonverbal communications displayed by the participants, which provided a more extensive set of data for analysis.

The foundation of the questions on the interview protocol (see Appendix A) was the research questions to capture the essence of the lived experiences of the participants. Also, open-ended questioning provided flexibility for me to gain a deeper understanding of the phenomenon, as it offered flexibility and autonomy (Creswell, 2007). Therefore, enabling me to capture both textual and structural descriptions from the participants (Creswell, 2007).

Table 2

*Alignment of Research Questions and Interview Questions*

Research Questions	Interview Questions
1. What were the views of parents of at-risk students regarding the challenges they face with using LMSs?	<ol style="list-style-type: none"> <li>1. What are your views as it relates to using technology as a major part of building academic skills for your child, at home?</li> <li>2. How would you describe a typical day of helping your child at home using LMS?</li> <li>3. What have been your challenges with using LMS?</li> <li>4. How have these challenges impact your decision to continue or discontinue using the LMS?</li> </ol>
2. What were the experiences of parents regarding schools' orientation and training in relation to their decision to use school LMSs designed for parental access?	<ol style="list-style-type: none"> <li>5. Describe how you became aware of the learning platform and the expectations of using it to help your child at home?</li> <li>6. How have the orientation and training provided by the school impacted your use or nonuse of the learning platform?</li> <li>7. How do you feel about the school's expectation of you in helping your child by using online resources?</li> </ol>
3. How did parents describe their experiences with technology and schools' support in relation to their use of learning platforms designed to assist students at home?	<ol style="list-style-type: none"> <li>8. Describe your experiences, pertaining to the support provided by the school in using LMSs.</li> <li>9. How do you think the level of support given in utilizing LMSs enhance or hinder your full use of the platform?</li> <li>10. How do you think the school can support you in using learning management websites more frequently or continuously?</li> <li>11. If you could make a list what would be the top four areas that the school could improve upon to help you to understand and use LMSs?</li> </ol>
4. How did parents feel about establishing a technology learning institute that will provide useful training in classroom technology for parents?	<ol style="list-style-type: none"> <li>12. What are your views on the school providing a place for parents to get training in using LMSs?</li> <li>13. How do you think this could benefit you as a parent?</li> <li>14. What are some skills that you think would be beneficial?</li> <li>15. What factors would prevent you from attending this training institute?</li> </ol>

### **Procedures for Recruitment, Participation, and Data Collection**

I collected the data within 30 days, which included identification of the participants, acquisition of signed consent forms, interview scheduling, and conduction of interviews. At the onset of the data collection process, I attended each subdivision Homeowners' Association Meeting and informed the parents of the purpose of the research, its implication for education reform, and an invitation extended to their participation in the study. I disseminated invitation packets, which included a parent invitation letter (Appendix B), a self-disclosed survey (Appendix C), and a copy of the informed consent form to parents to voluntarily participate in the study. I identified the at-risk students based on parents' self-disclosure of student's low level of mastery on the Georgia Milestone Assessment and having three, or fewer logins reported on the learning website.

Parents who indicated an interest by returning the self-disclosed survey and bottom portion of the invitation letter were contacted by telephone, over the course of a week, to recruit and informed them of the decision taken for them to participate or not participate in the study. During this contact, I reemphasized all legal and ethical ramifications attached to their involvement in the study.

Students' level on the Georgia Milestone Assessment and login information disclosed by parents, along with parents' age and subdivision in which they lived were the basis for parents' selection. Therefore, students were first grouped according to grade level and login activity, using a bottom-up hierarchy predisposition. Bottom-up hierarchy referred to selecting parents, of students, with the lowest login activity and moved

upward until the sampling group was selected. Next, I considered each parent age and the subdivision in which she lived. I included these criteria to select a diverse group of parent representative of the population.

I gave parents who indicated an interest to participate in the study copies of an invitation letter, a self-disclosed survey, the consent form, along with self-addressed envelopes, and cover letters to reiterating the purpose of the study and interview procedure for their perusal. Within 7- 10 days after I received the survey, I initiated follow-up telephone contacts to inform parents about the decision made for them to participate or not participate in the study and scheduled an appointment. Given their availability, selected parents were scheduled for a 45 minutes person-to-person interview. Next, I scheduled the meetings at locations that facilitate privacy and convenience for parents.

On concluding this exercise, I gave parents the option of participating in follow-up interviews via telephone or Skype communication. Then, I transcribed the audio-taped interviews and contacted the participants to confirm the accuracy of the data. At the conclusion of the initial interview, the participants were each thanked and presented with gift cards for their participation and contribution to the study. I uploaded data and notes collected through observation and bracketing into Nvivo for coding.

### **Data Analysis Plan**

Data analysis involved a thorough examination of the data gathered from the participants. I first transcribed and examined the data for relevant statements, sentences, or quotes that provided an understanding of the participants' feelings, beliefs, and

convictions about the phenomenon under study. I then used these statements to create clusters, used the groups to form themes, and used the themes to create both textual and structural descriptions of the participants' stories. Finally, I used both the textual and structural descriptions to compose a thick and rich description of the essence of the participants' experiences.

Data organization and management was an essential component of qualitative research. Creswell (2007) indicated that the data collection process is extensive and comprehensive, and the amounts of data collected during the data collection phase can overwhelm a researcher. The manual analysis of large quantities of data can be time-consuming.

To efficiently organize and manage the data collected, NVivo served as a data management tool. NVivo software is suitable for managing and organizing large or small data sources (Miles et al., 2014). It facilitated the coding of data collected for qualitative analysis; therefore, in this phenomenological study, NVivo assisted in storing, organizing, retrieving, and linking various data collected during the field experience.

According to Ishak and Abu Baker (2011), data collected in qualitative studies can provide meaningful results. However, the inundation of data can become burdensome; therefore, data must be laundered, grouped into smaller clusters, and arranged into themes before it becomes usable in the data analysis process. To assist in the organization and management of data, NVivo was employed. Consequently, I used NVio to organize and store data in folders created in the Navigation Viewed section for evaluation.

After the interviews, I imported the audio recordings, transcribed the written notes verbatim, and uploaded them into files created on NVivo. Next, I divided the data into codes, segments, themes, units, and descriptions. Creswell (2007) refers to data coding as, "...reducing the data into meaningful segments and assigning names for the segments" (p.148). In the initial coding, I conducted a line by line examination of the data (see Charmaz, 2006). Next, I arranged the data into priori categories.

Also, I employed color code to keep track of participants' statements. The data were classified based on similarities and differences among the participants' experiences. Additionally, I administered a cross-case analysis of words, phrases, and situations, to create a "naturalistic generalization" (Creswell (2007, p. 163). Data that did not appear to fit into any of the basic categories, known as winnowing, was discarded (Creswell, 2007).

The themes and categories were selected based on names that I generated, to appropriately describe the data in each group (Creswell, 2007). I further scrutinized the data and margin notes to identify trends in the data. Themes generated from the data helped me to write a detailed description of the essence of parents' lived experiences with the school and their reluctance towards the use of LMSs. I based the findings on the research questions fielded in the study.

### **Issues of Trustworthiness**

The issue of trustworthiness is an important aspect of a qualitative study, as it is directly related to the accuracy, consistency, and repeatability of the results reported in the research (Patton, 2002). Creswell (2007) and Maxwell (2013), emphasized that the researcher is an instrument in the research; therefore, there is a strong possibility that my



actions could impact the credibility of the research. Consequently, I adopted systematic and rigorous strategies, applied in qualitative studies, to provide quality data that can stand up to other researcher's scrutiny; as it related to the method and design selected, data collection and analysis accuracy, and a well-crafted written report that illuminated the essence of the participants' experiences.

### **Credibility**

I minimized internal threats to validity as it pertained to the accuracy of data collection by providing copies of the transcripts and their interpretations to the participants for review. This review gave participants the opportunity to correct any errors detected. Patton (2002) referred to this step as member checking.

Likewise, I employed peer debriefing strategy to add further validity to the research. Lincoln and Guba (1985) posited that the purpose of peer debriefing is to enable an independent peer to analyze aspects of the research to detect errors, which might be undetected by me, due to my involvement in the research. This strategy ensured that my assumptions, biases, or attitude had not influenced the results of the research.

Similarly, I ensured the accuracy of the data interpretations by administering analytic triangulation. Consequently, I made attempts to analyze the data with rigor, by logically perusing and organizing the data using Moustakas (1994) modified Vann Kaam's analysis in searched of alternative themes, patterns, and rival explanations (see Patton, 2002). Participants participated in two interviews, using various sources (person-person, Skype, and telephone interviews), collected at different times, which were

crossed examined to enhance validity; enabling a perusal of the data from multiple angles and so confirmed the responses of the participants.

### **Transferability**

Similarly, a comprehensive report was written that provided neutral, yet, rich description of the participants' experiences, interspersed with direct quotes to support the report. Similarly, a clear account of any biases or predispositions that I had were made explicit to the reader or other researchers. Additionally, discrepancies in participants' responses were compared not only with the participants' responses but also in comparisons to the responses of other participants.

### **Dependability**

According to Lincoln and Guba (1985), dependability refers to the degree of transparency evident in research based on the consistency and reliability of the research content. The use of member checking, audit trail, and triangulation provided clarity and rigor about the research reliability. Furthermore, NVivo was used to enhance the dependability of the research as it had the potential to store and managed transcribed coded data, and their analysis in a secure platform, therefore, strengthening the credibility and trustworthiness of the study.

### **Confirmability**

Lincoln and Guba (1985) posited that confirmability and objectivity are similar, in that the results of research are not based on the researcher's biases but are guided by the research context. Therefore, a step that was taken to satisfy the internal validity test and preserve the confirmability of the research was to bracket my thoughts and

predispositions, during the interview process. Additionally, I revisited the data collected to ensure that the emerging themes were the participants' accounts of their experiences, which I used to inform the study's findings.

### **Ethical Procedures**

Miles et al. (2014) emphasized that researchers must be cognizant of their actions about wrongness when conducting research, as researchers must adhere to specific guidelines to protect participants' rights and build relationships with the respondents. In conducting this study, I took several steps to preserve the moral and ethical quality of the research.

Before the start of this study, I approached each principal from the targeted school for their cooperation in conducting the research with parents who had students attending these schools, both verbal and written consent were secured. Next, I requested approval to conduct the study from the Walden University IRB. Upon receiving a conditional approval from IRB, I sent a letter providing information about the intent of the study and a copy of the approved proposal to the proposed school board, for approval and permission to conduct the study; however, the school district did not grant me permission.

I then submitted a permission to change the cooperation partners to that of Homeowners living in subdivisions that were served by the school district three lowest performing schools based on the Georgia Milestone Assessment Test results (Georgia Department of Education (2015a)). After securing signed letters of cooperation, an approval was granted by the Walden University IRB Team to conduct the study.

Similarly, when I received permission from IRB, I formally informed the Homeowner's Association officials and arranged to attend their subdivision meetings at the targeted site where I informed prospective participants about the intent of the study.

As mentioned earlier, protecting the rights of participants is a key role of researchers (Creswell, 2009; Miles et al., 2014); therefore, I made an effort to protect the identity and the confidentiality of the participants. I prepared Informed consent forms and gave them to participants to inform them of the nature and purpose of the study, their expected roles as participants, and the right to withdraw from the study at any time without consequences (Moustakas, 1994). I informed prospective parents that their participation in the study would serve as an opportunity for them to voice their stories and will present educators with new knowledge that might enable them to make better decisions in supporting parents to assist children more efficiently and effectively. Based on the phenomenon of reluctant behavior exhibited by parents regarding the use of technology, there was a strong possibility that parents would show the same reluctant attitude toward participation in the study; therefore, as an extrinsic reward, I informed the parents of a monetary incentive in the form of gift cards worth twenty dollars for participating in the study.

Although the study did not involve collecting a significant amount of personal information from the parents, I maintained the confidentiality of the data collected. I secured a signed confidentiality agreement from TranscriptionStar (Appendix D) and had each of the audio recordings of the interview transcribed. I then uploaded and stored all data collected in NVivo on a password-protected computer. The data stored included the

tape recordings of the interviews and all written field notes. As I did not collect identifiable personal data from the participants, I assigned pseudonyms to the participants during data analysis. The data collected will be kept for five years, after which I will destroy the data. Destroying the data will involve deleting all files about the study.

### **Summary**

This chapter included a comprehensive description of the methods and procedures selected for this qualitative study on describing the lived experiences on the reluctance of parents with at-risk students to use LMSs to provide at-home assistance in a small southeastern suburban school district in the United States. The chapter also included the purpose of the study, a rationale for using a phenomenological approach, the role of the researcher, the targeted participants, the data collection instrument, the data collection procedure and the data analysis procedure. Also, included in the chapter are the reliability, validity, and biases that might have affected the study and the manner in which I addressed them. This chapter also included an outline of the steps employed to protect the rights of participants as stipulated in the IRB guidelines to maintain moral and ethical principles with specific details on handling parents' anonymity. Chapter 4 included a thick and rich description of the findings and results.

## Chapter 4: Results

### **Introduction**

The purpose of the study was to (a) describe the challenges parents faced using LMSs to help their children; (b) identify how an orientation process, training, and school support system might affect parents' decisions to use LMSs; (c) describe parents' experiences with technology and schools regarding their use of learning platforms to establish effective communications among teachers, parents, and students; and (d) determine participants' perceptions of the possibility of establishing a learning institute to accommodate parents' need for technology training. Rogers's (2009) theory of diffusion, Davis's (2008) TAM, and Epstein's parent involvement model were the theoretical lenses I used to analyze each participant's responses to develop an understanding of parents' experiences concerning their reluctance to using the learning platforms provided through the school.

The study included four research questions:

Research Question 1: What were the views of parents of at-risk students regarding the challenges they face with using LMSs?

Research Question 2: What were the experiences of parents regarding school's orientation and training in relation to their decision to use school LMSs designed for parental access?

Research Question 3: How did parents describe their experiences with technology and schools' support in relation to their use of learning platforms designed to assist students at home?

Research Question 4: How did parents feel about establishing a technology learning institute that will provide useful training in classroom technology for parents?

This chapter includes the following subsections: Setting, Demographics, Data Collection, Data Analysis, Evidence of Trustworthiness, and Results. The chapter ends with a summary.

### **Setting**

After I received both verbal agreement and written letters of cooperation from the principals at the targeted schools within the district and acquiring a conditional approval to conduct the research, the school board informed me that it was not granting permission to conduct the research because I no longer worked in the school district. As a result, I sought alternative means of gaining approval to conduct the research. I chose to target the subdivisions served by the targeted schools and immediately contacted six subdivisions that had a diverse range of house costs to ensure I recruited a diverse mix of parents. I sent e-mail correspondence and a letter of cooperation (Appendix E) to all six homeowners' associations. After a series of phone calls and a meeting with three of the homeowners' association representatives, I acquired permission to attend their homeowners' meetings. No one from the other three subdivisions contacted me.

At each of the homeowners' association meetings, I outlined the purpose of the study, the benefits and risks, and the level of confidentiality involved if parents chose to participate in the study. I then disseminated the package that included an invitation letter, an informed consent form, and a short survey to parents who showed an interest in participating in the study. I disseminated 14 packages among all three subdivisions.

### Demographics

The participants consisted of six parents who lived in three separate subdivisions that served students attending the three lowest performing schools in the district based on the Georgia Milestone Assessment Test results for 2015-2016. The six participants formed a diverse group of parents that included four African Americans, one from the Caribbean, and one Caucasian. No male parents volunteered for the study. Purposive sampling led me to the prospective participants based on parent's age group, child's grade level, and subdivision in which they lived. I selected six participants, assigned each of them a pseudonym, and informed one remaining prospective participant of the selection decision. The interviews took place in timeframes convenient for the participants. Table 3 shows the participants' demographics. I have assigned pseudonyms to all participants in order to ensure confidentiality.

Table 3

*Breakdown of the Demographics of the Participants*

Participants	Parent's age group	Child's grade level
Subdivision A		
Alia	46-56	5
Norma	35- 45	4
Subdivision B		
Mahra	45-50	5
Laura	24-34	3
Subdivision C		
Lavaun	24-34	3
Arlene	46-56	4



**Alia**

Alia was a single parent who had recently migrated from a large inner-city school district in the northern United States less than 2 years before. She had three school-age children attending school in the district and was a stay-at-home parent due to an injury sustained in a car accident that placed her on disability several years ago. Alia had a daughter in the fifth grade. She and her children lived in the largest of the three subdivisions targeted in this research. While at home, Alia participated in neighborhood activities and sometimes volunteered to help high school students with their Spanish. No other family members assisted at home in the schooling of her daughter. However, Alia had a friend who taught in a nearby district whom she relied on for direction and support when she needed help or advice regarding the education of her children.

**Laura**

Laura was the youngest participant. She was a teenage mother who lived with her parents. Laura worked at a nearby fast-food restaurant on a shift basis, which sometimes prevented her from being at home with her son. Her son was in the third grade and spent time with his grandmother, who acted as guardian when Laura was at work or away from home. Her son had attended the same school since pre-K. Although her son spent a considerable amount of time with his grandmother, she did not take an active part in his schooling regarding the use of technology. Laura's sister was in the 10th grade and assisted with technology-related issues when the need arose.

**Mahra**

Mahra had been married for 13 years and was a working mother. She took on the responsibility of helping the children with homework and other school-related issues. The couple had three school-aged children. Her middle child and was in the fifth grade. He struggled in both English and mathematics, although his other siblings were doing well in school academically. Mahra worked in corporate America and scheduled her job so she could be home to assist her children after school. As a result, she completed some job-related tasks online. She considered herself computer savvy. When asked about any information she would like to share that would be relevant to understanding the nonuse of the school's online technology platforms, she responded that she thought the data collected were sufficient.

**Norma**

Norma was a single mother who lived with her children and two sisters. Norma had twin boys in the fourth grade. She worked in the medical field, but only on the night shift. Her sisters shared the responsibility of sending her twins to school in the mornings. The twin had been attending the same school since first grade. The twins were separated from each other in school and therefore did not have the same homeroom. The participant took responsibility for the children's studies after school. No other family members were actively involved in their learning with regard to using technology or completing homework. Norma reported that she could use the computer effectively.

**Arlene**

Arlene had two sons. Her younger son was in the fourth grade, and her other son attended college in another state. Arlene was separated from her husband, who moved away to another state after the separation. Therefore, he did not play a direct role in his son's schooling at home. Her son struggled in all subject areas and had been attending the school since pre-K. The family lived in the most affluent small neighborhood of the three neighborhoods included in the study.

**Lavaun**

Lavaun had been married for 10 years and had four children. The participant and her husband both shared the responsibilities of schooling the children. Both were working parents. Lavaun worked part time, and her husband worked full time. His job involved working on shifts. As a result, both parents synchronized their working hours around the children's schooling and baby care. The second child was in the third grade. He struggled with reading but did well in mathematics. This family also lived in the most affluent subdivisions of the three neighborhoods targeted for this study.

**Data Collection**

Data collection is an integral part of a study, as the ethical strength of the research depends on the quality of the data collected. Pietkiewicz and Smith (2014) posited that six participants are adequate for collecting data in phenomenological research. Data collection took place for 1 month, which began in January and ended in February. The students who lived in the three targeted subdivisions attended schools that had the highest percentage of at-risk students in attendance, as indicated by the 2016 Georgia Milestone

Assessment results. The selection process began immediately after securing permission from each subdivision homeowners' association board members. I attended three short end-of-year homeowners' association meetings, which provided the opportunity to explain the purpose of the study and disseminate a package to each parent who showed an interest.

The package included an invitation letter, a consent form for information purposes, and a single-item self-disclosed survey for each prospective parent who had a child in third, fourth, or fifth grades to fulfill the initial requirements related to the criteria for selection. I disseminated four packages in Subdivision A, six in Subdivision B, and 4 in Subdivision C. Eight prospective parents responded from the 14 invitations given out. Six parents did not return the requested documents or declined participation.

I began the selection process by eliminating parents who self-disclosed as logging in more than three times per week and who had a child who scored higher than the beginning level on the Georgia Milestone Assessment Test; only one prospective participant met these criteria. Based on this selection process, seven parent volunteers met the criteria of (a) having a child in the third, fourth, or fifth grade; (b) self-disclosed logging in less than three times per week; and (c) self-disclosed having a child scoring at the beginning level of the Georgia Milestone Assessment Test. Further purposive sampling took place based on children's grade levels and subdivisions in which parents resided, which resulted in the selection of six parents who met all criteria without duplicating the criteria for selection. I contacted the seventh prospective participant and informed that individual of the decision.

Data collection began after scheduling a meeting place convenient to each participant. Four of the face-to-face interviews took place at a nearby coffee shop, one at the public library, and one at the participant's home, as she thought this was most convenient for her. I began each interview by reviewing the participant's rights and the confidentiality guaranteed to each participant. Each participant then received the consent form to sign. Interviews involved a semistructured prepared interview protocol (see Appendix A). Each interview session lasted between 25 and 45 minutes and was audio-recorded. The data collection took place in subdivisions that served students who attended the three lowest performing schools in one school district in the southeastern United States, as measured by the Georgia Milestone Assessment Test results for 2015-2016. All data were collected as planned.

One change that occurred during the data collection and analysis process was the manner in which I analyzed the data. Initially, I selected NVivo11 for the analysis of the data for this study. However, as I interacted with the data within NVivo software, I decided to triangulate the analysis with Moustakas (1994) modified van Kaam method. I discovered that as a novice researcher a systematic structure would enhanced my analytic capabilities. Moustakas' seven-steps analysis offered a systematic and structured way to analyze phenomenological data. I decided to apply Moustakas modified van Kaam method as my primary data analysis method and NVIVO as the secondary data analysis approach. Switching to the modified van Kaam method did not impact my research negatively, as this gave me an opportunity to become more intimate with the data. Also,

Moustakas modified van Kaam approach is specifically designed to analyze phenomenology data.

### **Data Analysis**

Upon completing the data collection, I began the analysis of the interview data using Moustakas's (1994) modified van Kaam method. Moustakas posited that when analyzing phenomenological data, it is necessary for researchers to separate their thoughts from the participants', which Moustakas referred to as epoché. I conducted the data analysis process in a systematic manner using the qualitative management system NVivo to store, organize, and code the collected data. The process also involved strictly following the seven-step process of the modified van Kaam method.

#### **First Step: Listing and Preliminary Grouping**

The first step of the modified van Kaam method involved listing and preliminarily grouping the experiences from the interviews with the six parents who had children considered at risk of academic failure. The term used to describe the process of listing all the significant or relevant themes of the experience is horizontalization (Moustakas, 1994, p. 120). Guided by my research questions, I applied horizontalization by listing each salient point expressed by all six participants. Listing the participants' utterances enabled me to identify pertinent topics that emerged as I scrutinized the quotes. The results section contains the complete results from the first stage of the phenomenological analysis.

### **Second Step: Reduction and Elimination**

The second step of the modified van Kaam method was reduction and elimination (Moustakas, 2004, p. 121). Moustakas suggested asking two questions to identify the invariant constituents or other substantial perceptions and experiences of the participants:

- a. Does it contain a moment of the experience that is a necessary and sufficient constituent for understanding it?
- b. Is it possible to abstract and label it? If so, it is a horizon of the experience.

Expressions not meeting the above requirements are eliminated. Overlapping, repetitive, and vague expressions are also eliminated or presented in more descriptive terms. The horizons that remain are the invariant constituents of the experience. (p. 121)

Using the two questions presented by Moustakas (1994), I carefully examined all six transcripts of the parents. I then determined which parts of the interviews to integrate into the next five phases of the phenomenological analysis. The basis of all the lived experiences collected was the research questions, which I kept and considered as the initial invariant constituents of the study. The results section contains the complete results from the second stage of the phenomenological analysis.

### **Third Step: Clustering and Thematizing the Invariant Constituents**

The third phase of the phenomenological analysis involved grouping or clustering the primary invariant constituents from the previous stage. Moustakas (1994) indicated that researchers should consider the “clustered and labelled constituents” (p. 121) as the “core themes” (p. 121) of the study. Using NVivo11, I methodically coded the invariant

constituents and core themes. The results section contains the complete results from the third stage of the phenomenological analysis.

#### **Fourth Step: Final Identification of the Invariant Constituents and Themes**

The fourth step was the verification and validation of established themes and invariant constituents presented in the previous stage. This process served to authenticate the formed themes and invariant constituents and to substantiate the content of the interviews with the new results established. Moustakas (1994) recommended asking another three questions to complete the fourth step of the phenomenological analysis: “(1) Are they expressed explicitly in the complete transcription? (2) Are they compatible if not explicitly expressed? (3) If they are not explicit or compatible, they are not relevant to the participant’s experience and should be deleted” (p. 121).

To validate and verify the emerging themes, I used NVivo11 to organize both explicit and implicit responses expressed by the participants. First, I omitted participants' expressions that were not compatible with the research questions. In addition, I corroborated with the participants on the accuracy of my interpretations. The results section contains the complete results from the fourth stage of the phenomenological analysis.

#### **Fifth Step: Individual Textural Descriptions**

The fifth step of the analysis included establishing individual textural descriptions. This stage of the analysis involved using the authenticated themes and invariant constituents to produce the individual textural structural descriptions of the six participants. Verbatim examples from the interviews again supported and explained the



new results. To create the textual description for the participants, I summarized the relevant explicit and implicit responses of each participants, hence highlighting the unique experience of each participant. The results section contains the complete results from the fifth stage of the phenomenological analysis.

### **Sixth Step: Individual Structural Description**

The sixth step of the seven-step method was structuring the individual structural descriptions. This step involved using the experiences of the six parents from the “Individual Textural Description and Imaginative Variation” (Moustakas, 1994, p. 121). To accomplish this step, I reexamined each participant’s individual textual description and made note of the commonalities and differences in their perceptions about LMSs. Using these common and differing themes, I compiled the individual structural description for all six participants. The results section contains the complete results from the sixth stage of the phenomenological analysis.

### **Seventh Step: Textural-Structural Description**

The seventh and last step of Moustakas’s (1994) method was the incorporation of both the invariant constituents and the finalized themes of the study. This incorporation of experiences involved emphasizing the “meanings and essences” (p. 121). The last step also encompassed the perceptions of the participants on the four lived experiences discussed based on the four research questions of the study. During this step, I revisited the field notes collected during each interview. These notes assisted me to detach my biases, while synthesizing the essence and meaning that emerged from the data. The

results section contains the complete results from the seventh stage of the phenomenological analysis.

### **Evidence of Trustworthiness**

Morse (2000) posited that trustworthiness in qualitative studies provides the criteria that indicate the degree of rigor within a study, as trustworthiness acts as an evaluation checklist of the worthiness of the study. The study included several strategies that pertained to ensuring evidence of trustworthiness, as recommended by Lincoln and Guba (1985). The credibility of research depends on the ability of a researcher to collect, interpret, and report the findings of the data accurately. Credibility resulted from employing member checking for all participants. Each participant had the opportunity to review and correct the transcribed interview for accuracy. I made and edited clarifications based on the feedback received from each participant.

Transferability involved a carefully crafted description of how I collected, analyzed and interpreted the data. This detailed description ensured that other researchers could replicate my study in other contexts or with similar participants (Morse, 2000). Also, I employed follow-up interviews with the participants, which served to clarify statements and responses that were not clear. Data from both conversations underwent analysis for discrepancies or similarities, which helped to establish the transferability of the findings. With the complete and careful execution of Moustakas's seven-step method, the established themes successfully described the experiences of the participants. Miles et al. (2014) posited that inclusion of a variety of original information strengthens the transferability of a study.

I believe that researchers may use the findings from this study for future reference given the rich descriptions of the perceptions and experiences found in the study. Guaranteeing the dependability of the research was possible again due to the use of member checking. Member checking involved sharing the transcribed data with the participants to ensure the transcriptions and reports of the participants' experiences were accurate and based on the participants' accounts. Each participant was able to review the content and confirm its accuracy. In addition, I ensured the content of the study was correct and truthful, even with the ever-changing contexts of the educational system based on current technology in the 21st century. The subject was both relevant and operative. Finally, following the strategy of confirmability made it possible for others to confirm and substantiate the study. An audit trail served to ensure any predispositions did not affect the analysis of the data, which involved noting and listing my thoughts and revisiting them throughout the data analysis. This systematic method enabled me to separate my predispositions and focus on the meaning that emerged from the participants' accounts.

## **Study Results**

### **Research Question 1**

Research Question 1 was as follows: What were the views of parents of at-risk students regarding the challenges they face with using LMSs? The focus of the first research question was on the views of parents of at-risk students regarding the challenges they face with using LMSs. From the analysis of the interviews, five themes emerged. The majority of the participants indicated that the main challenge was experiencing

difficulties and confusion accessing and understanding the LMS due to a lack of knowledge of the LMS. Other challenges were shifting from the traditional method of learning to the new LMS, finding time to learn and practice the LMS, lacking confidence to use the program, and lacking confidence on the effectiveness of the program. A breakdown of the results of the first research question appears in Table 4.

Table 4

*Breakdown of the Results of Research Question 1*

Themes	<i>n</i>	%
1. Experiencing difficulties and confusion accessing and understanding the LMS due to a lack of knowledge of the LMS	5	83
2. Shifting from the traditional method of learning to the new LMS	3	50
3. Finding time to learn and practice the LMS	2	33
4. Lacking confidence to use the program	1	13
5. Lacking confidence on the effectiveness of the program	1	13

**Major Theme 1: Experiencing difficulties and confusion accessing and understanding the LMS due to a lack of knowledge of the LMS.** The first major theme of the study was the challenge of experiencing difficulties and confusion in accessing and understanding the LMS due to the lack of knowledge of the LMS. Five of the six participants (83%) shared this experience. Alia admitted that the LMS had been difficult to accept and adjust to, as there was not sufficient information provided to help the parents understand the materials and the system in general. Alia noted that she would refer to textbooks because of the difficulty using the LMS to find the needed materials or lesson assistance, which would make the process shorter or less time consuming:

No, I don't think so because I have seen my daughter struggling to use the site and tried to help her . . . and I was just as confused as she was, as there wasn't

enough information . . . to help us resolve the problem that was online . . . on the school website.

Because I had problem like this . . . comprehending the material.

Sometimes what I would have her do is refer back to the textbook instead of focusing that much on the online material. . . . Right, because it is confusing to both of us finding the material needed to do the work.

Mahra shared several examples of why the use of and support for the LMS had been difficult. Mahra highlighted how it had been difficult to use the system as it did not seem to be as user friendly as it should be. In addition, Mahra admitted how she found the program to be generally “difficult”:

Like I said, I just feel like some of them [LMSs], they’re not fast enough. Even my oldest son, over the summer he had taken a Spanish class. I tried to take the Spanish class online with him. I couldn’t figure it out.

[It was difficult] to manipulate it. I couldn’t figure it. Like for the life of me, the class ended, and I still couldn’t figure it out. It depends on what system, yeah. I do think it would be helpful, but they just have to make some of them more user friendly.

Norma stated that the programs and websites provided were helpful. However, her main concern was the difficulty understanding the format and interface of the platforms and applications:

You know at times they give you a certain, what would I say, format that you have to follow and sometimes—I mean, it has its pros and its cons. You know, I

like, what do you call it, I like the websites that they give us to do the research. It helps a lot. It's just that at times it's probably, at times you're going to find it difficult to understand their format.

Probably give us more education about it. . . . Try to make it seem as if it's more of a help . . . as opposed to just putting us off on it. They just make it seem as if it's just a second resource as opposed to number one. But give us more education about it. . . . And then probably we'll be more prone to using it . . . as opposed to just throwing us out there.

Arlene indicated that one of the challenges was logging into the site. The participant gave an example where the username and password did not work numerous times and she spent a long time communicating with and contacting the teachers to ask for help about the issue. Arlene shared,

One of the challenges was logging into the site. . . . The user name and the password that were given were just not working. Each time I login . . . it tells me that the password/username was invalid. Therefore, I had to contact the school again . . . and each time they gave me a new password . . . and I tried to login. . . . Every time I want to log in, it keeps telling me that the username/password was invalid . . . so that didn't spur my interest anymore.

I think I would be able to use it to help my child if more information is given about the site, if parents are more educated about the site, if more interest is built about the site like going to the site a few times prior to actually logging on.

Lavaun indicated that the older parents find it more difficult to understand and get used to the diverse types of technology or, in this case, the LMS. Lavaun noted the lack of help from implementers hindered the full use and realization of the LMS. Lavaun also shared that there were times when she failed to help her children with their homework because she did not understand what their children were doing:

I think the fact that there is no outside help for parents to utilize this platform properly, it is a bit frustrating, because they send the kids home with all these online websites to use, and you know, some parents are older, so they're not using technology. Some parents don't have that . . . I guess . . . that level of understanding of technology, like myself. I mean, when it comes to these types of technology, I don't know how to use it, and because I don't know how to use it, it's somewhat embarrassing to tell your child, "Hey, I can't help you with your homework, because I have absolutely no clue what you're doing."

***Minor Theme 1: Shifting from the traditional method of learning to the new LMS.*** The first minor theme of the first research question was the challenge of having to shift from the traditional method of learning to the new LMS. This was shared by three of the six participants (50%). Alia stated that one of the main challenges in using the LMS is the need to shift from the traditional methods to advanced technology. Alia indicated that the current method of teaching is far different from what they had when growing up:

I mean it's a different form of teaching from how I grew up. We didn't have all these technologies. I'd rather have someone explaining to me step by step, than trying to read and understand . . . or to manipulate or to work the problem or

answer the questions. I don't . . . I don't think I do well with it if there's not someone really explaining step by step or not there to answer my questions when I have a problem. Also, the navigation on the computer can be sometimes frustrating to me but not the children.

Laura indicated that one of the biggest challenges is the need to learn and adjust to the new platforms given that they did not grow up with the same system. Laura admitted that the mental shift that technology is now a significant part of education is one aspect or issue that she needed to focus on:

The biggest challenge is that I never grew up using these platforms. So first, mentally I have not made that shift to understanding where it is very instrumental, and it is required for my child or my children to be using these platforms. So that's the first challenge: making that mental shift and realizing that technology is integral in educating our students today and parents have to [have] an integral part in its process as well. So first, I have a challenge of making that mental shift.

Lavaun noted that her challenge was understanding the need and use of technology. She shared an example of where there is usually a gap between the understanding of the student and the understanding of the parent. She stated how she gets frustrated with the difficulty in using and understanding the technology and the LMS:

I guess my challenge in using it would be the fact that I really don't understand the technology. I wasn't taught the technology personally, so I don't know how to use it. My son would know how to use it better than I can, and if he doesn't need help, then there's really nothing for me to do.



***Minor Theme 2: Finding time to learn and practice the LMS.*** The second minor theme was the difficulty finding time to learn and practice the LMS. Two of the six participants (33%) stated their perceptions on this theme. Laura stated that another challenge was finding the time to learn and understand the different platforms introduced by school leaders. Laura admitted that, as a working parent, her schedule was always filled with different activities and understanding about the platform was not seen as a priority:

Another challenge I have is time because I have to be working away from home. Finding the time to work on these platforms with my children is very challenging because I'm most of the time away, and if I'm at home, I'm doing other activities because I don't see using the platform as a priority.

Arlene explained that time is another challenge for the parents as, given the complex process of the LMS, time is crucial in learning and manipulating the platforms:

One of the challenges I could say is time. Time is important in using it because most of these learning platforms have to do with manipulating the site. Going on different things, clicking on whatever, reading, and it takes time. So, time is one.

***Minor Theme 3: Lacking confidence to use the program.*** The third minor theme was lacking the confidence to use the program. One participant (13%) described her experience. Laura noted that with the lack of skills and knowledge in using the LMS, lack of confidence had also developed. The participant shared how the different challenges had also made her uncomfortable using the platforms to teach her child and monitor the learning and progress of her child:

Another challenge, third challenge, I'm having is not really knowing about the platform, but hearing about it from my child at home and not—was never trained one-on-one with the platform so I know exactly what's on it, I don't know exactly how to get in without my child, and I don't know how to manipulate using the system to get the data that I want to get based on tracking my child's progress on it. So those are the various challenges that I'm having. Not being very comfortable going to the platform on my own and feeling confident in logging in, reading the modules, going back and forth.

***Minor Theme 4: Lacking confidence on the effectiveness of the program.*** The fourth minor theme was the lack of confidence on the effectiveness of the program. One participant (13%) discussed her experience. Mahra highlighted that another challenge was the lack of confidence in the effectiveness of the program. She admitted that the structure and content of the program were not helpful to the progress of the students:

I use them, but I don't like the ones that the school has, necessarily. I have access to Internet, so it's not a problem to use them. It's just that I don't feel like they're that great. For example, MobyMax that you just mentioned. Like unless the teacher unfreezes what the child like the next level, it's not there. So even if your child can do more, they can't go on to learn anymore because it's frozen until the teacher unfreezes it.

## **Research Question 2**

Research Question 2 was as follows: What were the experiences of parents regarding schools' orientation and training in relation to their decision to use school

LMSs designed for parental access? The focus of the second research question was on the experiences of parents of at-risk students regarding the orientation process and training in relation to their decision to use a LMS. A major theme of the study was receiving orientation instructions through printed handouts. Other important processes and perceptions on training were lacking practice and training assistance from the school, needing to use a more user-friendly program, and attending school orientations at the start of the school year. The breakdown of the results for the second research question is in Table 5.

Table 5

*Breakdown of the Results of Research Question 2*

Themes	<i>n</i>	%
1. Receiving orientation instructions through printed handouts	5	83
2. Lacking practice and training assistance from the school	4	67
3. Attending school orientations at the start of the school year	2	33
4. Using a more user-friendly program	1	13

**Major Theme 2: Receiving orientation instructions through printed handouts.** The second major theme established was the experience of receiving orientation instructions through printed handouts. The theme was shared by five (83%) of the participants. Alia stated that the orientation and training process was mainly done by handing out a printed information sheet containing the code to access the online platforms. She shared, “The school had sent out paper notices on these online tools to the parents. She took home a paper with information that she could go online that also includes a code to access these online tutorials.” Laura said that she also became aware of

the instruction through the paper distributed by the teacher to her child. The paper contained the details about the platforms and the instructions on how to use them:

I became aware of the platform because my child took home a paper from her teacher informing me about the platform and giving me instruction as to how to register and create a passcode. But that's how I became aware, when my child came home with a sheet of paper with the instruction, the name of the platform, and instructions on how to use the platform.

Norma also shared that school administrators send out documents that contain the needed details on how to navigate and use the school websites and programs. The participants shared that although the documents are helpful, the parents need more training to adjust and understand the new learning and teaching methods offered through the school:

Well, the only thing they probably do is send home documents or paperwork that will say, okay go to such and such website, click here, click there, and you'll get in there. Or they'll tell you to set up a password . . . for us to go in there. Set up, you know, register the account or whatever you call it. But whereas in talking or discussing . . . how to go about it, I have never had any training. I don't know, maybe because I've been going to their meeting frequently . . . but wherein which they'll tell us . . . or it's not a lot. They'll just hand you a paper and tell you how to get there and that's it.

Arlene stated that she learned about the platform through mail sent from the school. In addition, her child also mentioned the new programs:

I became aware of the learning platform based on an e-mail that was sent home from the school. That was it, and my child also told me about it because he was told about it at school, so it's email and my child how I became aware of the site.

Lavaun stated that she also received a paper with the needed information on how to access the website. However, Lavaun noted that the letter only contained the access information and not instructions on how to use the website:

A letter was sent home with a username and the password with the website stating that this is where his—some of his—homework will be and daily activities and so on and so forth. And that was pretty much it. That was how we were introduced to it. It wasn't a letter, per se, it was more like, "Hey, this is the code. This is the website."

***Minor Theme 1: Lacking practice and training assistance from the school.*** The first minor theme of RQ2 was the lack of practice and training assistance from the school. Four participants (67%) mentioned the theme. Alia stated that the printed information with the username and password is not enough to help the parents. She then suggested that to develop parents' computer literacy, school leaders could offer a monthly computer class that would increase the confidence of the parents in teaching and helping their children with their schoolwork:

But I think that would really help if they have a parent computer class at least once each month so that we could improve our computer literacy in order to help our children.

I have not received any note. I have not heard of the school providing any learning information to be honest. I haven't heard any—I've not received any pamphlet from my daughter saying that they offer anything like that. And I've been to parents' meetings, teachers' meetings, and I haven't heard anything yet.

As I've said before, I haven't been given an invitation for orientation provided by the school to help with online learnings. So, as I said before, I think if that is offered, it will make us as parent more knowledgeable on how to use the computer so that we can help our children.

[Will training help?] Definitely, because I'll feel more confident. I think if I'm trained how to use it, I'd be more willing to help my daughter because I'd have that confidence that I know what I'm doing.

Laura shared and highlighted how parents need more training and assistance from the school. She reasoned that without enough knowledge, her confidence decreased.

Furthermore, Laura indicated that without the proper knowledge on computers and technology, parents find it difficult to use the platforms to teach and guide their children:

No, I'm not confident. I'm not a confident user of the platform. I don't feel as if I got the necessary training that I need in order to manipulate and use the system on my own. I'm very dependent on my child in knowing . . . she knows it more than I do. And because of that, I am intimidated by the use of it, using it on my own. So, I'm not very comfortable at this point going to the platform on my own.

. . . I would need help as to how to manipulate the system and how to get what I need, tell me what I'm looking for, what I should be looking for and tell

me how do I get that information and how do I use that information. So, it's pretty much becoming familiar with the entire system so that I'm comfortable to go in by myself, log out by myself and create report, once I go in, look over those reports and see what I need to do or what section I need to complete or assign, and certain areas if I can at that period assign questions for my child to complete.

Arlene described herself as not technologically savvy. Therefore, proper training from the school could be effective in increasing her interest and confidence in the newly offered platforms for the benefit of the children. The participant explained that very little information was given to the parents, resulting in confusion and difficulty maximizing the platforms fully:

I think I would be able to use it if I receive the proper training from the school. I am not tech savvy like others, but I think if the schools have like practical training for me, where they show me what to do, how to access the information, how to manipulate the site, what to click on so as to save time for me as a working parent, I will be able to use the site as best as I should.

No, I don't think I have enough training in using it. I'm not aware that there was a meeting held for parents to come and see what the site is—at the school to be trained. I'm not aware of that. We were not given that kind of training in order to use the site or to use the site.

Lavaun also indicated that there is a lack of information, orientation, and training from the school. As a result, she was not able to use the platforms properly to assist her child. Furthermore, Lavaun described the experience as “frustrating” and “embarrassing”:

I think I would—I think, not even just me, I think most parents would—actually need some kind of training on technology just to be able to utilize the platform that’s available for our children. We don’t—we weren’t raised within the technology-based era, or however they want to call it. So, for us, pen and paper will go too, but for our sons and our daughters nowadays, it’s computers and websites, and it’s a lot more difficult for us, because it’s . . . over . . . it’s overwhelming because we just don’t know how to do it. And when you don’t know how to do something, it makes it very discouraging, and it’s kind of embarrassing to tell your child, “Hey, I can’t help you, because I don’t know how to do it.”

The school did not provide any kind of training, or resources, or classes, not even a 1-800 number where you can call and have a step-by-step instruction. It was—nothing like that was provided. To me it’s like they expect you to know about it and how to use it.

***Minor Theme 2: Attending school orientations at the start of the school year.***

The second minor theme of RQ2 was attending school orientations at the start of the school year. Two participants (33%) mentioned the theme. Mahra shared that they attended an “e-learning” seminar or orientation at the beginning of the year. Furthermore, she noted that such meetings would help the parents understand the concept of the platform more effectively:

I’ve been in the school system a long time, so I’ve been to many Title I meetings, but at the beginning of the school year, they always have something at each of the



schools to tell you what they have as far as like e-learning. And then the teachers always take the time to remind you to towards the, you know, throughout the year.

Oh, I don't mind it at all. I would—I do other things, not only e-learning, I mean I help them with other stuff using like workbooks and whatever I can, so that's fine with me.

Norma added that at the start of the school year, parents receive a list of the websites that they can access with information needed for the platforms:

Not so much. They always, you know in the beginning of the school year, they always give us those extra websites saying that we can go on there and get extra, you know, more information, a little bit more . . . I guess help from it. But it's always been where in which they always in the beginning they always told us upfront about the website where we can go. From, you know, the schools from opening of school, the school year, beginning of the school year, a lot of times I will speak to their teachers and they tell me, "Oh you can go on here or go on there," and they help and you get more information. You know they always tell you, the teachers always tell us, the parents, that there is a particular website that you can go to get more information.

***Minor Theme 3: Using a more user-friendly program.*** The last minor theme for RQ2 was the need for a more user-friendly program. The theme was shared by one participant (13%). Mahra shared that other programs are available that are more user-

friendly. Mahra noted programs outside the school are much easier to understand and use compared to the platforms offered through the school:

I use other things outside of the school, like IXL. IXL is so much more user-friendly. They have all the grades set up. You can pick the topic that you want. It gives you a score at the end. It's just so much simpler, like I've used also the one on TV. I had it for a whole year, it's something Mouse [chuckles].

I don't feel like the content is good enough. I don't feel like they're user-friendly enough, so, I have never actually sat down with anyone to go over how to use it. It's just, this is what we have available and I go on and I try it and I see whether or not I like it.

### **Research Question 3**

Research Question 3 was as follows: How did parents describe their experiences with technology and schools' support in relation to their use of learning platforms designed to assist students at home? The focus of the third research question was how parents described their experiences with technology and schools in relation to their use of the learning platforms designed to establish effective communications among teachers, parents, and students. The theme again had one major theme, which was the experience of needing assistance in learning about the LMS. Other important experiences hindering the effectiveness of the LMS regarding developing effective communications were lacking time to learn the LMS, using older resources to teach their children, lacking access to the Internet, and lacking interest to learn about the LMS. The breakdown of the results for the third research question are in Table 6.

Table 6

*Breakdown of the Results of Research Question 3*

Theme and minor themes	<i>n</i>	%
1. Needing assistance in learning about the LMS	4	67
2. Lacking time to learn the LMS	2	33
3. Using older resources to teach their children	2	33
4. Lacking access to the Internet	1	13
5. Lacking interest to learn about the LMS	1	13

**Major Theme 3: Needing assistance in learning about the LMS.** The third major theme was needing assistance in learning about the LMS. Four participants (67%) made comments related to the theme. Alia highlighted that using platforms can be effective for the progress and development of their children and noted school leaders should focus on training and assisting the parents to become more computer literate:

I think as a parent it's also his or her responsibility to help our child at home with their schoolwork in order to help them to be successful in school. Parents should really help their child with schoolwork at home. Parents just cannot leave it to the teachers, but honestly some of these tools on the computer I don't even understand it myself as a parent. Maybe what they need to do is have a parent class to show us how we can navigate the computer or learn how to use a computer for these online tutorials for our children. . . . These parent classes would help parents to become more computer literate.

Mahra emphasized that for communication to be more effective, schools need to provide more support to the parents: "Tell them to go ask their teacher and I—I mean, I honestly I don't know of a support system, I really don't." Norma stated that not much support is available through the school. Parents not used to technological advances are asking for

more training and support to maximize the advantages of the LMS for the benefit of their children. Laura replied,

Well, the support is not so much there because again they just give you, they just put it out there for you to know that if you need the extra . . . it's there. Or if the child doesn't understand, it's there. Basically, the teachers are putting off everything to these websites. So, I mean it's a good thing and it's also a bad thing. I don't know, maybe because I'm living in the past.

***Minor Theme 1: Lacking time to learn the LMS.*** The first minor theme for RQ3 was lacking time to learn about the LMS. Two participants (33%) mentioned the theme. Alia explained that some parents do not have the time to learn the LMS fully: "Some of us just won't have the time to help our children with their online tutor and some parents do not know how to navigate on a computer." Arlene added that another hindrance in the full use of the LMS is the lack of time to train and develop the skills to use or maximize the contents of the platforms. In addition, Arlene observed that the content needed to be more challenging for the students:

These challenges have caused me not to be interested in the sites anymore, because as a working parent, you don't have that kind of time to spend trying to figure out what your child is supposed to do online. Another thing is that I don't use it anymore because I had the problem logging in with the password. Each time it says it's invalid, so that's another thing I discontinued using it. Also, the few times when I got on the site, there isn't much work for my child to do based

on the grade he's in, so I think more challenging stuff need to be there for the child to do on a weekly basis.

***Minor Theme 2: Using older resources to teach their children.*** The second minor theme of the third research question was using older resources to teach their children. Again, two participants (33%) mentioned the theme. Laura stated that she was much more comfortable using older resources such as textbooks, as she noted that they are easier to access than the platforms and newer programs:

So, with resources, I tend to point my child to examples that they worked at in the classroom. So, I would ask them for examples: "Let me look at the examples that they used in the classroom." And I would try to understand those examples and then instruct them from that point. I always use textbooks also, or if I don't understand something, I would go to the Internet to look it up and to inform myself about whatever topic is my child is working on. So the resources that I use are ones that I would have to stop, take a minute, look up the information and ones that I can—that I'm comfortable in using, stuff like the Internet, stuff like the textbook because I know how to use—look at the—look at the table of contents and find the area that she is working on. So, I'm very comfortable in using older resources that have educated our children for years.

Norma explained that the platforms are not used much for communication and learning because they are still more comfortable in using the older resources:

Not so much a reason, it's just that I just stick to my old way of learning, you know. So, it's not so much that we don't use it.

How it has affected my use of it . . . is not using it. You know because if I use it more, then I would probably benefit more, and the boys. But because I'm so not into the technology nowadays because of my upbringing, it's always been book in a classroom setting with a teacher as opposed to online and me trying, to you know basically, to be honest is that the teachers are putting more work on us. That's why they give us these websites, you know [chuckles]. But it is good because eventually down the line, that's what we're going to have to use. Because the world going to . . . cyber world, so I'm going to have to eventually accept it and figure it out and use it more often as opposed to not using it.

***Minor Theme 3: Lacking access to the Internet.*** The third minor theme was the lack of access to the Internet. One participant (13%) mentioned the theme. Alia stated that not everybody can afford the Internet; therefore, she noted that in this aspect alone, the parents might fail to assist their children under the new platforms: "Not everybody can afford Internet. So, if that going to be a means of a way to help our child, some of us might fail in that area."

***Minor Theme 4: Lacking interest to learn about the LMS.*** The fourth and final theme was the lack of interest to learn about the LMS. One participant (13%) mentioned the theme. Laura noted that the LMS was not her main priority. The difficulty in understanding the LMS decreased interest on the platforms:

To be honest, it's not an integral part of my priority. I know it sounds very bad, but that's the truth. The only time I really think about the website is if my daughter brings it up. She is excited about using it at school, so she wants to tell

me about it. But I honestly don't think about it. I don't know exactly how to get on the platform without her presence, so it's really not an integral part of what my responsibilities or my responsibilities towards educating my child is, and that's the truth. I don't know the website to go onto. She has it written down, and if I need to get on it, then she would be the one to put it in. It sounds bad, but that's the truth.

#### **Research Question 4**

Research Question 4 was as follows: How did parents feel about establishing a technology learning institute that will provide useful training in classroom technology for parents? The fourth and final research question of the study led to a discussion on how the parents felt about establishing a technology learning institute that would provide useful training in classroom technology for parents. All six participants (100%) considered the institute to be a positive proposal. However, they also had other perceptions on the effectiveness, such as needing a convenient place and time for LMS training, increasing parents' involvement in children's learning, receiving help from other parents, and learning without having to spend. The breakdown of the results of the final research question are in Table 7.

Table 7

#### *Breakdown of the Results of Research Question 4*

Theme and subthemes	<i>n</i>	%
Feeling positive about establishing an institute	6	100
–Needing a convenient place and time for LMS training		
–Increasing parents' involvement in children's learning		
–Receiving help from other parents		
–Learning without having to spend any money		

**Major Theme 4: Feeling positive about establishing an institute.** The last major theme of the study was feeling positive about potentially establishing an institute. The major theme had four underlying subthemes. Subthemes are issues parents consider pivotal in establishing an effective training programs.

*Subtheme 1: Needing a convenient place and time for LMS training.* Alia shared that establishing a technology learning institute would help the parents become more involved with the LMS. However, she highlighted the need to accommodate and be considerate of the time and availability of working parents:

I mean, that's good. I mean, they have a specific place as long as it's a convenient place and time for the parents because you know parents have to work. The place, I mean, the place you have to maybe do a survey again to see what location is better, what time is better for most parents. Maybe once a month on a weekend, like a place to go on Saturdays.

Oh, it would benefit me a lot, because if my child is doing good, I'm happy. Every parent's wish is for their child to be successful. So definitely it would be a benefit, it will be a plus.

Laura explained that the training institute would benefit the parents and improve their computer literacy. Laura also added that the parents might be more encouraged if an institute was in place and a convenient time was offered for the training:

It would benefit me because then I would be able to plan better when it comes to my busy schedule. Everybody has a busy schedule; I know. So, it would help me to be confident in knowing where I'm going to go and what I'm going for. If there



was a designated area for us to get training, it would also help one parent to be able to tell another parent about the training. If it is kept in one particular place, then you would definitely get more parents encouraging other parents as to where to go and it would not be a challenge for them to find the area or to wonder where it's going to be. So, I really think that would help me very well.

The only—what would prevent me is, first, not getting the information on time about the meeting, so I can put in for the time away from work. So that would be the main reason and secondary reason would be illness. That would be the only two reasons why I would not turn up to a meeting like that. If I was not given time enough—enough time to plan, enough time to plan to be away—then I would have a problem in attending the meeting because I would—I have to work.

Mahra shared that having a definite place for the training of the LMS would help the parents. She added that the institute would be instrumental in helping the parents' computer literacy. Mahra also commented the time should also be convenient, as most parents have work and other responsibilities:

I think that would be a good idea. I would use it if—I would definitely take advantage of it if they were doing something like that. Maybe there are programs that I haven't used that are better that I'll learn about. I don't know, I mean I just feel like if they're offering a training, I'm sure there'll be something that I can get out of it and I take advantage of it. . . . It has to be at a convenient time. If they hold it at the school and it's a convenient time, I'll definitely go.

Norma noted that the main issue is the scheduling of the training programs. However, if the setting and time are scheduled properly, she indicated she was willing to participate to gain more knowledge and education about the platforms:

Well, the only thing I can think of that would prevent me from attending is my work schedule. . . . As I said, I work mostly evenings, so it would have to be scheduled for the day . . . in the morning or on my days off. . . . Maybe if they tell us about the meeting early enough so I can prepare for it. But that's the only thing I can think of that would prevent me from going.

Yes, I would agree with that 100%. Give me . . . wherein which they can have like meetings you know. I know they have Title I nights and stuff, where to be honest it prevents me from going or attending because of my job—the time for work . . . my working schedule. But if they can probably do meetings wherein which in the daytime we can meet and give us a better understanding and explain to us more about these websites that they have, then I will agree 100% with it. But I just need more education on it. I have not gotten enough education on these websites. Probably my boys know more than I do.

Arlene described the proposed school as an “excellent idea.” However, the participant still highlighted the importance of scheduling and time for the parents, as they have to attend to their other responsibilities aside from the training for the newer platforms:

I believe the school providing a specific place for parents to be trained in use of the LMS would be a very excellent idea. Therefore, parents would know that at such and such a time this place is open towards parents coming to be trained, and

they could set up a schedule for the year to say at this time, this place is available for the training towards LMS. So that would be a very brilliant idea.

Such a training would be great, but if that training was done during my working hours, that would prevent me from going. If the training I think might not benefit me, I wouldn't want to go. If the training—if that training—okay I spoke about time already. If that training—if I'm not interested to it, that's another thing, because if I'm interested, I would want to go. Interest would be part of it and if I think it's not going to benefit my child, I wouldn't want to go.

Lavaun emphasized that if the training sessions from the institute would be convenient, then it would be more helpful for the parents:

I can't see anything outside of work . . . being able to prevent me from utilizing this training. I think if they kept this somewhere like after-work hours or something, that is something I would be able to do, or even on the weekends, if they had a class on the weekend, I definitely think parents would attend that as well.

***Subtheme 2: Increasing parents' involvement in children's learning.*** Laura shared that the proposed institution would be effective in getting the parents to be involved in their children's education. Laura also highlighted the importance of convenience, scheduling, and time for the parents:

That would be very effective in my opinion. That would be a very effective way to get parents to be very instrumental in using the learning systems at home because there would be no confusion as to where to go and it would be helpful for

those parents who are extremely busy. They would be able to plan their schedules around knowing as much information as they can get beforehand. So that would be very effective, in my opinion, a very effective suggestion if it was put in place for parents.

Lavaun shared her excitement about using the resource. She indicated that the institution would also benefit the students and the whole community:

I said as a parent, for me, I would be very excited to utilize that resource, and I think my son will be very happy, because I will be somewhat learning alongside with him, but in that respect, I will go into it knowing what I need to do. So, I would definitely be happy with that if that was something that was offered—I would take advantage of that.

Oh, I think that would be excellent. I think if they could have something like that, I think it will be wonderful for everyone. I think it will be fantastic for the county, because I'm sure the parents are willing to learn it and the grade for the county would definitely go up. It will be awesome for your school, wonderful for your kids and the parents. I don't see a fall in everyone knowing how to utilize this platform if the school has something available for us to learn how to do it.

***Subtheme 3: Receiving help from other parents.*** Arlene stated that another advantage of the institution is the opportunity to collaborate and interact with other parents:

Well, the advantage is that other parents would be there. Some of them are more tech savvy than you. They themselves would be able to support you in

manipulating the site. They themselves would be able to educate you on information that you're not aware of based on the use of the technology. Having parents around too would motivate you. So, you're not the only parent there struggling, and we could help each other, share ideas, brainstorm each other, find out the weaknesses and the strengths of the site, of even yourself and after train each other.

***Subtheme 4: Learning without having to spend any money.*** Lavaun shared that another factor that school leaders need to consider is the financial situation of the parents. Not all parents could afford training, and receiving a free education on the platforms would help the parents:

Financially if that's something that's done for free, I also think that that's something that would draw more parents in, because it's hard to pay for after-school and all these other extracurricular activities, and then I have to pay for the class, so that's not necessarily going towards the parents' career or help the parents to make more money, but that probably the only other reason outside of work that would prevent me.

### **Individual Textural Descriptions**

Another step of the analysis was the formation of individual textural descriptions. The textural descriptions are the summaries of the participants' lived experiences containing their exact and analyzed responses from the interviews.

**Summarized textural description for Alia.** Alia stated that one key challenge is the shift or transition from the traditional methods of learning and teaching to the need to use technology:

We didn't have all these technologies. I'd rather have someone explaining to me step by step than trying to read and understand . . . or to manipulate or to work the problem or answer the questions. I don't . . . I don't think I'd do well with it, if there's not someone really explaining step by step or not there to answer my questions when I have a problem.

Alia said that the LMS was more difficult to understand and use compared to the older teaching and learning approaches:

Because I had problem like this . . . comprehending the material. Sometime what I would have her do is refer back to the textbook instead of focusing that much on the online material. . . . Right, because it is confusing to both of us finding the material needed to do the work.

Alia noted that the main orientation provided was through printed material distributed to the parents: "The school had sent out paper notices on these online tools to the parents. She took home a paper with information that she could go online that also includes a code to access these online tutorials." Alia also noted that the parents' computer literacy can be improved through monthly computer classes: "I think that would really help if they have a parent computer class at least once each month so that we could improve our computer literacy in order to help our children."

Alia noted that another hindrance in fully using the platforms is parents' lack of access to the Internet: "You know not everybody can afford Internet. So, if that is going to be a means of a way to help our child, some of us might fail in that area." Alia indicated that some parents do not have the time to learn and practice the newer platforms offered "because some of us just won't have the time to help our children with their online tutor and some parents do not know how to navigate on a computer." Alia also indicated that parents need more assistance in developing their skills in using the LMS. In addition, she stated that communication would be more effective if the parents are more trained and knowledgeable of the platforms:

Maybe what they need to do is have a parent class to show us how we can navigate the computer or learn how to use a computer for these online tutorials for our children. . . . These parent classes would help parents to become more computer literate.

Lastly, Alia said that the institute would be beneficial for the parents. She noted that school leaders should consider a convenient place and time for the training:

I mean, that's good. I mean, they have a specific place as long as it's a convenient place and time for the parents because you know parents have to work. The place, I mean, the place you have to maybe do a survey again to see what location is better, what time is better for most parents. Maybe once a month on a weekend, like a place to go on Saturdays.

**Summarized textural description for Laura.** Laura stated that one challenge is the need to adjust mentally from the need to employ traditional methods to the more recent technological advances integral to society:

The biggest challenge is that I never grew up using these platforms. So first, mentally I have not made that shift to understanding where it is very instrumental, and it is required for my child or my children to be using these platforms.

Laura also stated that time is an issue for parents:

Another challenge I have is time, because I have to be working away from home. Finding the time to work on these platforms with my children is very challenging because I'm most of the time away, and if I'm at home, I'm doing other activities because I don't see using the platform as a priority.

Laura noted that the inability to understand the program has led to her lack of confidence in utilizing it:

Another challenge, third challenge, I'm having is not really knowing about the platform, but hearing about it from my child at home and not—was never trained one-on-one with the platform so I know exactly what's on it, I know exactly how to get in without my child, and I know how to manipulate using the system to get the data that I want to get based on tracking my child's progress on it.

Laura responded that the only orientation received was from a paper brought home by her child: "I became aware of the platform because my child took home a paper from her teacher informing me about the platform and giving me instruction as to how to



register and create a pass-code.” Laura also responded that the lack of training and knowledge led her to having a lack of confidence about teaching and helping her child:

No, I’m not confident. I’m not a confident user of the platform. I don’t feel as if I got the necessary training that I need in order to manipulate and use the system on my own. I’m very dependent on my child in knowing . . . she knows it more than I do. And because of that, I am intimidated by the use of it, using it on my own. So, I’m not very comfortable at this point going to the platform on my own.

Laura noted that the effectiveness of the program is not apparent, which further decreases the interest of students:

You know, to be honest, it’s not an integral part of my priority. I know it sounds very bad, but that’s the truth. The only time I really think about the website is if my daughter brings it up. She is excited about using it at school, so she wants to tell me about it. But I honestly don’t think about it. I don’t know exactly how to get on the platform without her presence, so it’s really not an integral part of what my responsibilities or my responsibilities towards educating my child is, and that’s the truth. I don’t know the website to go onto. She has it written down, and if I need to get on it, then she would be the one to put it in. It sounds bad, but that’s the truth.

Laura also noted that the older resources such as the textbooks are much easier to use than the current technological advances,

So, the resources that I use are ones that I would have to stop, take a minute, look up the information and ones that I can—that I’m comfortable in using, stuff like

the Internet, stuff like the textbook because I know how to use—look at the—look at the table of contents and find the area that she is working on. So, I'm very comfortable in using older resources that have educated our children for years.

Laura indicated that an institute would definitely help the parents in increasing and developing their knowledge about the LMS. However, she emphasized that the time and place should be convenient for the parents as well:

It would benefit me because then I would be able to plan better when it comes to my busy schedule. Everybody has a busy schedule; I know. So, it would help me to be confident in knowing where I'm going to go and what I'm going for.

Laura stated that the institution would allow increased parent involvement:

That would be very effective in my opinion. That would be a very effective way to get parents to be very instrumental in using the learning systems at home because there would be no confusion as to where to go and it would be helpful for those parents who are extremely busy.

**Summarized textural description for Mahra.** Mahra said that it is difficult to understand the processes that involve the use and interface of the LMS:

Like I said, I just feel like some of them [LMSs], they're not fast enough. Even my oldest son, over the summer he had taken a Spanish class. I tried to take the Spanish class online with him. I couldn't figure it out.

Mahra also said that the program is ineffective: "I use them, but I don't like the ones that the school has, necessarily. I have access to Internet, so it's not a problem to use them.

It's just that I don't feel like they're that great."

Mahra indicated other programs are much easier to navigate and use:

I use other things outside of the school, like IXL. IXL is so much more user-friendly. They have all the grades set up. You can pick the topic that you want. It gives you a score at the end. It's just so much simpler, like I've used also the one on TV. I had it for a whole year, it's something Mouse [chuckles].

Mahra also indicated that the school orientations are effective in making the parents aware of the purpose of the programs,

I've been in the school system a long time, so I've been to many Title I meetings, but at the beginning of the school year, they always have something at each of the schools to tell you what they have as far as like e-learning. And then the teachers always take the time to remind you to towards the, you know, throughout the year.

Mahra said that a support system is not present or provided by the school: "Tell them to go ask their teacher and I—I mean, I honestly I don't know of a support system, I really don't."

Mahra stated that the institution would be instrumental in making the parents aware of the effectiveness of the platforms offered at the school:

I think that would be a good idea. I would use it if—I would definitely take advantage of it if they were doing something like that. Maybe there are programs that I haven't used that are better that I'll learn about. I don't know, I mean I just feel like if they're offering a training, I'm sure there'll be something that I can get

out of it and I take advantage of it. . . . It has to be at a convenient time. If they hold it at the school and it's a convenient time, I'll definitely go.

**Summarized textural description for Norma.** Norma noted that the program is effective. However, the main challenge found was the difficulty in using and understanding the overall processes of the LMS: "I like the websites that they give us to do the researches. It helps a lot. It's just that at times it's probably, at times you're going to find it difficult to understand their format."

Norma indicated that the documents with instructions and details are important but that an increased and focused training will be more effective:

I have never had any training. I don't know, maybe because I've been going to their meeting frequently . . . but wherein which they'll tell us . . . or it's not a lot. They'll just hand you a paper and tell you how to get there and that's it.

Norma stated that it is effective to have orientations at the start of the school year to access the information about the platforms:

Not so much. They always, you know in the beginning of the school year, they always give us those extra websites saying that we can go on there and get extra, you know, more information, a little bit more . . . I guess help from it. But it's always been where in which they always in the beginning they always told us upfront about the website where we can go.

Norma said that they were not getting the support needed to use the platforms effectively to communicate and gain knowledge:

Well, the support is not so much there because again they just give you, they just put it out there for you to know that if you need the extra . . . it's there. Or if the child doesn't understand, it's there. Basically, the teachers are putting off everything to these websites. So, I mean it's a good thing and it's also a bad thing. I don't know, maybe because I'm living in the past.

Norma noted that the older resources are much more effective: "Not so much a reason, it's just that I just stick to my old way of learning, you know. So, it's not so much that we don't use it."

Finally, Norma stated that the proposed institute would be more effective if school leaders carefully considered the schedule and convenience of the parents:

Well, the only thing I can think of that would prevent me from attending is my work schedule. . . . As I said, I work mostly evenings, so it would have to be scheduled for the day . . . in the morning or on my days off. . . . Maybe if they tell us about the meeting early enough so I can prepare for it. But that's the only thing I can think of that would prevent me from going.

**Summarized textural description for Arlene.** Arlene noted that educators should provide more training and assistance to the parents, as the process is much more complex for parents who are not as Internet savvy as their children:

One of the challenges was logging into the site. . . . The user name and the password that were given were just not working. Each time I login . . . it tells me that the password/username was invalid. Therefore, I had to contact the school again . . . and each time they gave me a new password . . . and I tried to login. . . .

Every time I want to log in, it keeps telling me that the username/password was invalid . . . so that didn't spur my interest anymore.

Arlene indicated that time is the key issue in learning about and adjusting to the program:

One of the challenges I could say is time. Time is important in using it because most of these learning platforms have to do with manipulating the site. Going on different things, clicking on whatever, reading, and it takes time.

Arlene said that the mail from school helped make the parents aware of the platforms:

I became aware of the learning platform based on an e-mail that was sent home from the school. That was it, and my child also told me about it because he was told about it at school, so it's email and my child how I became aware of the site.

Arlene stated that school leaders needed to realize that not all parents are technologically savvy, and they may need assistance navigating and using the platforms:

I think I would be able to use it if I receive the proper training from the school. I am not tech savvy like others, but I think if the schools have like practical training for me, where they show me what to do, how to access the information, how to manipulate the site, what to click on so as to save time for me as a working parent, I will be able to use the site as best as I should.

Arlene noted that the content of the program needed more improvement: "So, I think more challenging stuff need to be there for the child to do on a weekly basis."

Arlene also indicated that implementers should consider the scheduling of the training for those parents with work and other responsibilities:

I believe the school providing a specific place for parents to be trained in use of the LMS would be a very excellent idea. Therefore, parents would know that at such and such a time this place is open towards parents coming to be trained, and they could set up a schedule for the year to say at this time, this place is available for the training towards LMS.

Arlene responded that the institution would allow parents to interact with one another:

Having parents around too would motivate you. So, you're not the only parent there struggling, and we could help each other, share ideas, brainstorm each other, find out the weaknesses and the strengths of the site, of even yourself and after, train each other.

**Summarized textural description for Lavaun.** Lavaun noted that one challenge was the lack of help offered by school leaders about the proper use of the LMS:

I think the fact that there is no outside help for parents to utilize this platform properly, it is a bit frustrating, because they send the kids home with all these online websites to use, and you know, some parents are older, so they're not using technology. Some parents don't have that . . . I guess . . . that level of understanding of technology, like myself.

Lavaun also stated that the LMS would be more effective if school leaders supported and trained the parents on how to access and navigate the websites correctly:

I mean, when it comes to these types of technology, I don't know how to use it, and because I don't know how to use it, it's somewhat embarrassing to tell your

child, “Hey, I can’t help you with your homework, because I have absolutely no clue what you’re doing.”

Lavaun noted that the letter did not contain complete information about how to use the website:

A letter was sent home with a username and the password with the website stating that this is where his—some of his—homework will be and daily activities and so on and so forth. And that was pretty much it. That was how we were introduced to it. It wasn’t a letter, per se, it was more like, “Hey, this is the code. This is the website.”

Lavaun also noted that school leaders needed to develop training programs for the parents as well:

The school did not provide any kind of training, or resources, or classes, not even a 1-800 number where you can call and have a step-by-step instruction. It was—nothing like that was provided. To me it’s like they expect you to know about it and how to use it.

Lavaun said the support provided to parents was not enough: “The school doesn’t necessarily offer a lot of support with the use of the LMS. For me personally, what—for how I feel it, it doesn’t offer enough support for parents.” Lavaun stated that parents would be able to attend more if the schedule was after work or on the weekends:

I can’t see anything outside of work . . . being able to prevent me from utilizing this training. I think if they kept this somewhere like after-work hours or something, that is something I would be able to do, or even on the weekends, if



they had a class on the weekend, I definitely think parents would attend that as well.

Lavaun noted that the proposed institution would benefit the whole school community:

I said as a parent, for me, I would be very excited to utilize that resource, and I think my son will be very happy, because I will be somewhat learning alongside with him, but in that respect, I will go into it knowing what I need to do. So, I would definitely be happy with that if that was something that was offered—I would take advantage of that.

Finally, Lavaun indicated that learning without having to spend is a great opportunity for the parents:

Financially if that's something that's done for free, I also think that that's something that would draw more parents in, because it's hard to pay for after-school and all these other extracurricular activities, and then I have to pay for the class, so that's not necessarily going towards the parents' career or help the parents to make more money, but that probably the only other reason outside of work that would prevent me.

### **Individual Structural Descriptions**

Another step involved organizing the individual structural descriptions. This stage included compiling the perceptions and experiences of the six participants. The following subsections include the results.

**Structural description for Alia.** Alia noted that one key challenge is the shift or transition from the traditional methods of learning and teaching to the need to use

technology. Alia also noted that the LMS is more difficult to understand and use compared to the older teaching and learning approaches.

Alia indicated that the main orientation provided was through printed material distributed to the parents and that monthly computer classes could improve parents' computer literacy. Another hindrance Alia noted was parents' lack of access to the Internet. Alia also noted that some parents do not have the time to learn and practice the newer platforms offered through the school and that parents need more assistance in developing their skills in using the LMS. Lastly, Alia noted that the institute would be beneficial for the parents, but school leaders should consider a convenient place and time for the training.

**Structural description for Laura.** Laura noted that one challenge was the need to adjust mentally from employing the traditional methods to using the technological advances integral to society. She also noted that time is another issue for the parents. Laura indicated that the inability to understand the program led to her lack of confidence in using it.

Laura stated that the only orientation received was from the printed paper brought home by her child. In addition, she noted that the lack of training and knowledge led her to having a lack of confidence about teaching and helping her child. Laura indicated that the effectiveness of the program is not apparent, which further decreases the interest of students. Laura also indicated that older resources such as textbooks are much easier to use than current technological advances.

Laura claimed that an institute would help increase and develop parents' knowledge about the LMS. However, she emphasized that the time and place should be convenient for the parents. Lastly, Laura noted that the institution would lead to increased parent involvement.

**Structural description for Mahra.** Mahra claimed that it is difficult to understand the processes that involve the use and interface of the LMS and that the program is ineffective. Mahra stated that other programs are much easier to navigate and use and that the school orientations are effective in making the parents aware of the purpose of the programs. Mahra indicated that a support system is not present in the school or provided by school leaders. Mahra also indicated that educators will be instrumental in making the parents aware of the effectiveness of the platforms offered.

**Structural description for Norma.** Norma indicated that the program was effective but noted the main challenge found was the difficulty using and understanding the overall processes of the LMS. Norma claimed that documents with instructions and details are important, but that an increased and focused training would be more effective. Norma also claimed that it is effective to have orientations at the start of the school year to access information about the platforms.

Norma noted that parents were not getting the support needed to use the platforms effectively to communicate and gain knowledge. Norma indicated that older resources were much more effective. Finally, Norma claimed that the proposed institute would be more effective if the schedule and convenience of the parents received consideration.

**Structural description for Arlene.** Arlene stated that the school should provide more training and assistance to the parents, as the process was complex for parents who were not as Internet savvy as their children. Arlene said that time is the key issue in learning about and adjusting to comprehend the program. Arlene also said that the mail from school was useful in making the parents aware about the platforms.

Arlene noted that school leaders need to realize that not all parents are technologically savvy, and they may need increased assistance in navigating and using the platforms. Arlene indicated that the content of the program needed more improvement. Arlene also noted that educators should consider parents with work and other responsibilities when scheduling training and would allow parents to interact with one another.

**Structural description for Lavaun.** Lavaun indicated that one challenge was the lack of help offered by school leaders about the proper use of the LMS. Lavaun also indicated that the LMS would be more effective if educators supported and trained parents on how to access and navigate the websites correctly. Lavaun stated that the letter did not contain complete information about how to use the website and that school leaders need to develop training programs for the parents as well.

Lavaun indicated that the parents do not receive enough support. Lavaun noted that parents would be able to attend more if the schedule was after work or on the weekends. In addition, Lavaun claimed that the proposed institution would benefit the whole school community and that learning without having to spend is a great opportunity for the parents.

### **Textural-Structural Description**

The final step of the analysis contains a summary of the lived experiences of the participants. The explanations of the four main essences and lived experiences are according to the themes established under them. In addition, verbatim responses help to improve understanding of the experiences.

**Participants' challenges with using the LMS.** The key challenge discovered was the difficulties and confusion experienced in accessing and understanding the LMS due to the lack of knowledge on the LMS. Alia noted that one challenge of the LMS was the complicated process of accessing and understanding the content and materials:

Because I had problem like this . . . comprehending the material. Sometimes what I would have her do is refer back to the textbook instead of focusing that much on the online material. . . . Right, because it is confusing to both of us finding the material needed to do the work.

Mahra shared that she could not figure out the LMS, as educators did not provide the proper training and information:

Like I said, I just feel like some of them [LMSs], they're not fast enough. Even my oldest son, over the summer he had taken a Spanish class. I tried to take the Spanish class online with him. I couldn't figure it out. [chuckles].

Norma shared that the program is helpful for her children, but the format needs improving, as parents who are not technologically savvy continue to experience difficulties in understanding and navigating through the interface:

Probably give us more education about it. . . . Try to make it seem as if it's more of a help . . . as opposed to just putting us off on it. They just make it seem as if it's just a second resource as opposed to number one. But give us more education about it. . . . And then probably we'll be more prone to using it . . . as opposed to just throwing us out there.

Arlene shared that the system is difficult to comprehend and navigate, which decreases the parents' interest and enthusiasm about the program,

I think I would be able to use it to help my child if more information is given about the site, if parents are more educated about the site, if more interest is built about the site like going to the site a few times prior to actually logging on.

Finally, Lavaun noted that the LMS would be more effective if educators supported and trained the parents on how to access and navigate the websites correctly:

I think the fact that there is no outside help for parents to utilize this platform properly, it is a bit frustrating, because they send the kids home with all these online websites to use, and you know, some parents are older, so they're not using technology. Some parents don't have that . . . I guess . . . that level of understanding of technology, like myself. I mean, when it comes to these types of technology, I don't know how to use it, and because I don't know how to use it, it's somewhat embarrassing to tell your child, "Hey, I can't help you with your homework, because I have absolutely no clue what you're doing."

**The impact of orientation and training on LMS adoption.** Another experience discovered was receiving orientation instructions through printed handouts. Alia

indicated that the orientation mainly involved handing out a paper with information about the online platforms: “The school had sent out paper notices on these online tools to the parents. She took home a paper with information that she could go online that also includes a code to access these online tutorials.” Laura noted that the school sent out a paper with information:

I became aware of the platform because my child took home a paper from her teacher informing me about the platform and giving me instruction as to how to register and create a passcode. But that’s how I became aware, when my child came home with a sheet of paper with the instruction, the name of the platform, and instructions on how to use the platform.

Arlene added that the printed information is helpful, but the effectiveness will increase if parents have the proper practice and training,

But whereas in talking or discussing . . . how to go about it, I have never had any training. I don’t know, maybe because I’ve been going to their meeting frequently . . . but wherein which they’ll tell us . . . or it’s not a lot. They’ll just hand you a paper and tell you how to get there and that’s it.

Arlene shared that the mail was effective in making parents aware about the LMS:

I became aware of the learning platform based on an e-mail that was sent home from the school. That was it, and my child also told me about it because he was told about it at school, so it’s email and my child how I became aware of the site.

Lavaun noted that the letter only contained the username and passwords but lacked other information the parents needed to understand the purpose and content of the platforms:

A letter was sent home with a username and the password with the website stating that this is where his—some of his—homework will be and daily activities and so on and so forth. And that was pretty much it. That was how we were introduced to it. It wasn't a letter, per se, it was more like, "Hey, this is the code. This is the website."

**Participants' experiences with technology and schools' support in using**

**LMS.** Another key experience was needing assistance to learn about the LMS. Alia shared that parents would feel more encouraged to employ the LMS if they received adequate training on the programs and platforms:

Maybe what they need to do is have a parent class to show us how we can navigate the computer or learn how to use a computer for these online tutorials for our children. . . . These parent classes would help parents to become more computer literate.

Mahra stated, "Tell them to go ask their teacher and I—I mean, I honestly I don't know of a support system, I really don't." Norma highlighted that the program has advantages and disadvantages and that school leaders should provide more training to maximize the content of the platforms:

Well, the support is not so much there because again they just give you, they just put it out there for you to know that if you need the extra . . . it's there. Or if the child doesn't understand, it's there. Basically, the teachers are putting off everything to these websites. So, I mean it's a good thing and it's also a bad thing. I don't know, maybe because I'm living in the past.



Lavaun believed that parents do not receive enough support:

The school doesn't necessarily offer a lot of support with the use of the LMS. For me personally, what—for how I feel it, it doesn't offer enough support for parents. I am not sure what support it offers the children at school.

**Participants' perceptions about establishing a technology learning institute.**

The final meaningful experience was feeling positive about establishing an institute. Alia stated that an institute would be effective, especially if educators consider the parents' schedule and convenience: “Oh, it would benefit me a lot, because if my child is doing good, I'm happy. Every parent's wish is for their child to be successful. So definitely it would be a benefit, it will be a plus.” Laura stated that both the time and the setting should be convenient for the parents:

The only—what would prevent me is, first, not getting the information on time about the meeting, so I can put in for the time away from work. So that would be the main reason and secondary reason would be illness. That would be the only two reasons why I would not turn up to a meeting like that. If I was not given time enough—enough time to plan, enough time to plan to be away—then I would have a problem in attending the meeting because I would—I have to work.

Mahra stated that the institution would be advantageous for the parents, but the trainings should be at a convenient time:

Maybe there are programs that I haven't used that are better that I'll learn about. I don't know, I mean I just feel like if they're offering a training, I'm sure there'll be something that I can get out of it and I take advantage of it. . . . It has to be at a

convenient time. If they hold it at the school and it's a convenient time, I'll definitely go.

Norma shared that time would be a crucial factor in the success of the proposed institute:

I know they have Title I nights and stuff, where to be honest it prevents me from going or attending because of my job—the time for work . . . my working schedule. But if they can probably do meetings wherein which in the daytime we can meet and give us a better understanding and explain to us more about these websites that they have, then I will agree 100% with it. But I just need more education on it. I have not gotten enough education on these websites. Probably my boys know more than I do.

Arlene stated that scheduling would be important when establishing a formal institution:

Such a training would be great, but if that training was done during my working hours, that would prevent me from going. If the training I think might not benefit me, I wouldn't want to go. If the training—if that training—okay I spoke about time already.

Lavaun shared that the schedule of the training is an important factor in its success:

I think if they kept this somewhere like after-work hours or something, that is something I would be able to do, or even on the weekends, if they had a class on the weekend, I definitely think parents would attend that as well.

Laura stated that the institution would encourage parent interest and involvement given the potential increase in their computer literacy skills:

That would be very effective in my opinion. That would be a very effective way to get parents to be very instrumental in using the learning systems at home because there would be no confusion as to where to go and it would be helpful for those parents who are extremely busy. They would be able to plan their schedules around knowing as much information as they can get beforehand.

Lavaun indicated the effectiveness of the program to the whole community:

I think if they could have something like that, I think it will be wonderful for everyone. I think it will be fantastic for the county, because I'm sure the parents are willing to learn it and the grade for the county would definitely go up. It will be awesome for your school, wonderful for your kids and the parents. I don't see a fall in everyone knowing how to utilize this platform if the school has something available for us to learn how to do it.

Arlene noted the potential effectiveness of the institution in terms of the collaboration of the parents in increasing their computer literacy for the benefit of their children:

Some of them [parents] are more tech savvy than you. They themselves would be able to support you in manipulating the site. They themselves would be able to educate you on information that you're not aware of based on the use of the technology. Having parents around too would motivate you. So, you're not the only parent there struggling, and we could help each other, share ideas, brainstorm each other, find out the weaknesses and the strengths of the site, of even yourself and after train each other.

Lavaun stated that learning at an institution at no cost is another advantage:

Financially if that's something that's done for free, I also think that that's something that would draw more parents in, because it's hard to pay for after-school and all these other extracurricular activities, and then I have to pay for the class, so that's not necessarily going towards the parents' career or help the parents to make more money, but that probably the only other reason outside of work that would prevent me.

### **Composite Textural Structural Descriptions**

To recapitulate the presented findings, I completed another step. From the analyses of the last three steps of the modified van Kaam method, I also generated composite descriptions. These composite descriptions contain the “meanings and essences of the experience, representing the group as a whole” (Moustakas, 1994, p. 121). The report in this additional stage is the summary or overall experiences of the participants. The breakdown of the themes for all research questions are in Table 8.

**Participants challenges with using LMS.** The main challenge experienced by the parents of at-risk students in using the LMS was the difficulties and confusion accessing and understanding the LMS due to the lack of knowledge on the platforms. Other challenges included shifting from traditional methods of learning to the new LMS, finding time to learn and practice the LMS, lacking confidence to use the program, and lacking confidence on the effectiveness of the program.

**The impact of orientation and training on parents' LMS adoption.** Another experience of parents of at-risk students regarding the orientation process and training in relation to their decision to use the LMS was receiving orientation instructions through

printed handouts. Parents also found that they are lacking practice and training assistance from the school. In addition, they noted the need for a more user-friendly program. They also reported that they attended school orientations at the start of the school year.

Table 8

*Summary of Themes for All Research Questions*

Research Questions	Themes	<i>n</i>	%
RQ1. What were the views of parents of at-risk students regarding the challenges they face with using the LMS?	Major Theme 1: Experiencing difficulties and confusion accessing and understanding the LMS due to a lack of knowledge of the LMS	5	83
	Minor Theme 1: Shifting from the traditional method of learning to the new LMS	3	50
	Minor Theme 2: Finding time to learn and practice the LMS	2	33
	Minor Theme 3: Lacking confidence to use the program	1	13
	Minor Theme 4: Lacking confidence on the effectiveness of the program	1	13
RQ2. What were the experiences of parents regarding school's orientation and training in relation to their decision to use school LMS designed for parental access?	Major Theme 2: Receiving orientation instructions through printed handouts	5	83
	Minor Theme 1: Lacking practice and training assistance from the school	4	67
	Minor Theme 2: Attending school orientations at the start of the school year	2	33
	Minor Theme 3: Using a more user-friendly program	1	13
RQ3. How did parents describe their experiences with technology and schools' support in relation to their use of learning platforms designed to assist students at home?	Major Theme 3: Needing assistance in learning about the LMS	4	67
	Minor Theme 1: Lacking time to learn the LMS	2	33
	Minor Theme 2: Using older resources to teach their children	2	33
	Minor Theme 3: Lacking access to the Internet	1	13
	Minor Theme 4: Lacking interest to learn about the LMS	1	13
RQ4. How did parents feel about establishing a technology learning institute that will provide useful training in classroom technology for parents?	Major Theme 4: Feeling positive about establishing an institute Subtheme 1: Needing a convenient place and time for LMS training Subtheme 2: Increasing parents' involvement in children's learning Subtheme 3: Receiving help from other parents Subtheme 4: Learning without having to spend any money	6	100

**Participants' experiences with technology and schools' support in using**

**LMSs.** The parents also described their experiences with technology and schools' support in relation to their use of the learning platforms designed to assist students at home. The majority of the participants found that they needed assistance that would help them to use the LMS more efficiently. Parents also found that they lacked time to learn the LMS and found it more effective to use older resources to teach their children. Lack of access to the Internet and lack of interest in learning about the LMS affected communication through the LMS.

**Participants' perception about establishing a technology learning institute.**

Parents had a positive reaction about establishing a technology learning institute to provide useful training in classroom technology for parents. The parents noted it was important to have a convenient place and time for the LMS training. The participants indicated that the institute could help increase parents' involvement in their children's learning, parents could receive help from other parents, and parents could increase their learning at no cost.

**Discrepant Data**

According to Merriam (2002), discrepant data challenge the expectation or findings of a study. An analysis of this study findings produced one notable discrepant case that could not be substantiated by this research. One participant expressed that the LMS was ineffective in promoting self-pacing academic growth. The other five participants did not reveal any dissatisfaction related to the ineffectiveness of the LMS. It is possible that this participant had more experience using online platforms than the other

five participants, which may provide a possible explanation for her perception of the LMS. She stated:

I use them, but I don't like the ones that the school has, necessarily. I have access to Internet, so it's not a problem to use them. It's just that I don't feel like they're that great. For example, MobyMax that you just mentioned. Like unless the teacher unfreezes what the child like the next level, it's not there. So even if your child can do more, they can't go on to learn anymore because it's frozen until the teacher unfreezes it.

Mahra expressed her dissatisfaction with using a specific LMS. She indicated that the LMS limits the pace at which students learn, in that it required a teacher to assign the task before a student can move on to the next lesson. Base on the restrictive feature of the LMS, Mahra found the LMS ineffective. Further research is needed to establish the effectiveness of this specific LMS.

### **Summary**

Chapter 4 contained the findings from the analysis of the interviews using the modified van Kaam method by Moustakas (1994). The purpose of the study was (a) to describe the challenges parents faced using management learning systems to help their children; (b) to identify how an orientation process, training, and school support system might affect parents' decisions to use LMSs; (c) to describe parents' experiences with technology and schools regarding their use of learning platforms to establish effective communications among teachers, parents, and students; and (d) to determine participants' perceptions of the possibility of establishing a learning institute to accommodate parents'



need for technology training. With the seven steps of the van Kaam method, four major themes and several other minor themes or other significant perceptions and experiences were generated. The next chapter should discuss the findings in relation to the literature, the limitations, recommendations, implications, and conclusions of the study.

## Chapter 5: Discussion, Conclusions, and Recommendations

### **Introduction**

The purpose of this qualitative phenomenological study was to (a) describe the lived experiences of parents who have children considered at-risk of academic failure, specifically those regarding challenges with using management learning systems to help their children, (b) identify how the orientation process, training, and school support system might have impacted their decisions to use the LMS, and (c) ascertain their perceptions on the possibility of establishing a learning institute to accommodate parents' technology training. Rogers's (2009) theory of diffusion, Davis's (2008) TAM, and Epstein's parent involvement model were the theoretical lenses I used to analyze each participant's responses to develop an understanding of parents' experiences concerning their reluctance to using the learning platforms provided through the school. School leaders have implemented various LMSs to deliver resources for parents to assist students with academic skills at home; however, some parents have demonstrated reluctance in using the technology.

There has been little research on the lived experiences of parents of at-risk students related to their use of LMSs. The data collected in this study provided insight into some of the challenges that have hindered participants' use of the LMS and the effect of orientation and training on participants' decisions to use LMS resources. The study involved describing participants' perceptions of the possibility of school leaders providing training to boost parent involvement levels.

Rogers (2003) explained that the introduction of any new technology is a process that involves knowledge, persuasion, and decision, which is directly related to the participant rejecting or accepting the innovation. My key findings supported this assertion and indicated that parents' non-use of the LMS resulted from lack of knowledge about the LMS and its effectiveness, resistance to adjusting mindsets to accommodate the new approach to education, lack of time, lack of confidence in using technology, ineffective orientation practices, and insufficient support and assistance in using the online platforms, in general. The results also indicated that parents felt positively about schools providing training for them in using LMSs.

Three theorists provided the framework I employed in the study: Davis' technology adoption theory, Rogers' innovation diffusion theory, and Epstein's parental involvement model. Both Davis's technology acceptance and Rogers adoption theories share common intent as they relate to users' attitudes toward acceptance and use of innovation upon initial introduction. Participants' view of their experiences could directly link to their first encounters with technology; encounters that are believed to be negative compel non-use, while positive encounters produce empowerment (Govender, 2014; Holland & Piper, 2014).

### **Interpretation of the Findings**

In the following subsections, I discuss findings to confirm, disconfirm, and extend the body of knowledge available regarding some underlying problems faced by parents who are expected to use LMS resources at home to assist at-risk students academically.

### **Participants' Challenges with Using LMSs.**

The themes that emerged from the data marked the efficacy of Davis's (1989) and Rogers's (2003) theories regarding new technology implementation challenges. If parents are to be co-educators in their childrens' education, then school leaders should consider the approaches used to introduce, support, and maintain new users' empowerment. Doing so will help school leaders realize the success and sustainability of the technology programs in schools. Some parents believed that lack of knowledge about LMS, lack of confidence in using the technology, and lack of trust in the effectiveness of the LMS hindered their level of use. Participants' knowledge about the technology and their abilities to navigate technology confidently led to noteworthy implications for this study.

The data indicated that, for parents who encountered difficulties accessing and using the online system provided by school leaders, attitude was important. This finding was consistent with previous research. Gilly et al. (2012) found that individuals who face challenges outside their comfort zone when using technology often resort to alternate routes when difficulties occurred. All participants noted that technology was beneficial. However, some parents who faced difficulties resorted to soliciting help from family members or friends, or they turned to traditional ways of getting their children to complete the assignment. Gilly et al. referred to this coping practice as an "accommodation strategy of satisficing" (p. 70), which means completing a task using any means necessary. This coping skill had implications for the research, as many teachers have the perception that parents are not involved (see Christianakis, 2011).

Gu et al. (2013) showed that social experiences and upbringing could negatively affect the technology adaptation process, as individuals who fall outside the ambit of the technology era need to change their thought processes, behaviors, and actions to become competent users. Fifty percent of the participants admitted that one of the challenges they experienced was the inability to change their mind-set from the traditional pencil-and-paper learning that they experienced as children in school.

Parents' continued use of traditional resources had implications for this study, inasmuch as school leaders must seek ways to transition parents into the technological era if they expect parents to participate through technological sources. The findings in this study confirmed those of Johnson et al. (2012) and resonated with Plessis and Webb's (2012) contention that resistance to technology correlates with the newness of the technology introduced. The findings confirmed that parents face challenges accessing and understanding the interfaces of online platforms and are not able to use them effectively. Eighty-three percent of the parents reported that the LMS was difficult, confusing, or frustrating to use.

### **The Impact of Orientation and Training on Parents' LMS Adoption**

The second research question data, which related to parents' experiences with the orientation and training process and their decision to use a LMS, showed that orientation took place through printed correspondence at the beginning of the school year. The data further showed that hands-on practice or training was lacking, and that parents did not consider the applications user-friendly. The orientation process and lack of continuous

training affected parents' decision to reject the LMS, as parents felt inadequately prepared to use the systems effectively and efficiently.

Most parents showed concern for the lack of hands-on training for using LMSs. One participant emphasized that receiving paper communication without further training communicated that using the LMS was a choice. This perception had a significant effect in this study. Rogers (2003) indicated that individuals need convincing of a program's benefits, and the findings of this study indicated parents need to understand how to use the online platforms to their advantage if they are to be successful.

Technology adoption is more successful when users are actively involved in the training process (Uloyol & Sahin, 2016). According to the results of the study, using paper communication as the primary means of orientating parents on the implementation of the initiative was insufficient to ensure parents' active participation. This finding is consistent with Zhu's (2010) argument that change agents play a fundamental role in implementing technology given that proper orientation is necessary to keep parents informed about their children's schooling and the technologies used.

Similarly, parents indicated their desire for an interactive orientation. Based on this indication, principals and school leaders should consider employing a constructivism model when planning technology orientations (Uloyo & Sahin, 2016). The constructivist approach would ensure parents' orientation and training experiences are interactive, practical, beneficial, and meaningful.

## **Participants' Experiences with Technology and Schools Leaders' Support in Using the LMS**

Epstein's (2011) parent involvement model was pivotal in guiding my development of the research questions on teachers' and school leaders' providing the necessary support for parents to facilitate the best opportunities for students' growth. Epstein posited that school leaders have a responsibility to provide support and assistance that will ensure parents are able to deliver positive assistance to students at home. Parent assistance with technology challenges, furnished by the school, will strengthen the partnership between school leaders and parents. Likewise, this partnership will encourage a stronger home involvement experience for parents and students, which will ultimately affect students' academic achievement.

Demir and Yurdugul (2015) established that the successful implementation of technology hinges on individuals' technology readiness skills. Many of the parents expressed their belief that technology has the capability to enhance students' academic growth. However, a need exists for school leaders to provide training and assistance, so parents can eventually become computer literate. Most of the participants shared that being computer literate would boost their confidence and the likelihood of using the LMS more frequently.

The literature I reviewed highlighted how motivation can affect technology acceptance and use. The research results were consistent with others' findings that individuals' competence with technology is the core motivator for using technology. Parents shared their feeling of being incapable of using the online platforms efficiently.

Autio et al. (2011) explained that consistent interaction with technology increase users' confidence and level of interest in the technology used. My results indicated that parents needed to raise their standard of confidence, trust, and interest in using the online platforms to create a higher level of acceptance and success with LMS programs. To overcome the challenge that parents face, school leaders and policy makers must include strategic planning that will assist parents in developing the skills needed to function with confidence, which will result in a more successful use of LMSs.

### **Parents' Perceptions About Establishing a Technology Learning Institute**

Participants supported the topic of the final research question, which concerned parents' views on the school providing a particular place to conduct training. All six participants noted that instituting a workshop that would provide training in classroom technology would help them to meet their needs. Some parents expressed that networking, communicating, and collaborating with other parents would build their confidence and the required skills. One parent stated that a structured training would boost her confidence. She further expressed that she would be among other parents facing difficulties and she would not feel alone in this dilemma. The overwhelming positive outlook of parents pertaining to establishing a structured training institution has implications for school leaders in addressing parents' challenges.

In this study, I extended the body of knowledge on some of the problems experienced by parents in using the LMS that had influenced their reluctant attitude. The study also provided insight on how orientation practices can affect LMSs' use, and how parents feel about schools offering the training needed to be more efficient in using the



online platforms. Although this study took place in a small suburban district, specifically within three subdivisions, the insight provided highlights some considerations to improve the non-use of technological resources that leaders of larger schools have invested in to assist the teaching and learning cycle.

These research findings may provide insights for educators and school leaders in adjusting their orientation practices, training, and support provision for parents. The results also provide insight for policymakers regarding the funding that school leaders will need to establish training for parents' development. The need exists for parents' technology skill development. Researchers have shown that stakeholders such as educators and students need specific training in using technology. Parents, who are also stakeholders, should have the opportunity to obtain the technological skills necessary to assist their students if they are to become co-educators.

### **Conceptual Framework**

Davis's (1989) TAM, Rogers's (2003) innovation diffusion theory, and Epstein's (2011) parental involvement model provided the conceptual lens through which the current research was examined. I discussed the findings of this study in relation to the conceptual frameworks.

### **Participants' Challenges with Using LMSs.**

In this study, I used Davis's (1989) TAM to understand and draw conclusions on why parents of at-risk students displayed reluctance in using LMSs. Davis's TAM explicates determinants that incite individual's acceptance or rejection of new technologies. In this model, perceived ease of use and perceived usefulness are the two

principal concepts. The findings of this study support Davis's (1989) TAM framework that perceived ease of use determine the degree of adoption and use of an innovation. The results confirmed that parents' reluctance about the use of the LMS, stemmed from the challenges encountered in navigating and using the platform.

Similarly, TAM proposed that perceived usefulness determined the rate of adoption. That is, individuals' perception of innovation benefit increases the rate of adoption. Conversely, in the current study, the results showed that although parents believed that the LMS was beneficial, parents perceived ease of use took precedence over their perceived usefulness. This result confirmed Tarhini, Scott, Sharma and Abbasi's study (2015) that postulated that perceived ease of use dictated individuals' decision rather than perceived usefulness when there was a choice between these constructs. The current study findings showed that parents positive perception about the usefulness of LMS in their children's learning did not influence their attitude to use the LMS.

### **The Impact of Orientation and Training on Parents' LMS Adoption**

In this study, the participants' responses confirmed Rogers's (2003) innovation diffusion theory. Rogers's theory postulated that the manner in which innovations are introduced to potential adopters impact their decision to accept or reject the innovation. In the current study, the participants reported that the orientation process and lack of training influenced their reluctance in using the LMS. Participants believed that they were not sufficiently equipped to navigate the LMS confidently. Lwoga (2014) and Shin and Kang (2015) obtained similar findings and posited that the difficulties parents

encounter in adopting and accepting technology stem from school leaders' failure to provide adequate orientation.

The role of change agents is integral in the diffusion process to encourage adoption of implemented innovation (Rogers, 2003). This study found that parents received communication about the implementation of LMSs through printed materials, without training. This study corroborates Nasser et al. (2011) position that lack of reassurance in using LMS influences parents' attitude towards LMS.

### **Participants' Experiences with Technology and Schools Leaders' Support in Using the LMS**

According to Rogers's (2003) theory of adoption, change agents have a responsibility to facilitate opportunities that educate and train prospective adopters in accepting an innovation. In this study, the findings revealed that parents lack the confidence and motivation needed to use LMS. Parents indicated that they needed assistance that would build their skills and confidence using LMSs. Nasser et al. (2011) found that lack of knowledge impacts the level of technology use. Blau and Hameiri (2010) found that parents were motivated to accept and use technology when they were included in the onset of the implementation and supported by the implementers. Similarly, Rogers and Wright (2008) argued that exclusion of individuals in decision making about innovation can influence their level of acceptance. Rogers (2003) postulated that an individual's acceptance or rejection of technology is a process that progresses through a sequence of communication channels.

The results of the present research indicated that participants were not supported or included in the decision-making process of implementing the LMSs. The current study may corroborate Epstein's (2011) parental involvement model, which emphasized a need for school leaders to support parents so that students can reach their fullest potential. Ertmer and Ottenbreit-leftwich (2014) opined that lack of training, lack of support, and lack of knowledge are directly linked to reluctant attitude. Also, this study showed that parents have the desire to assist children at home; however, without the support of school leaders, parents are inadequately equipped to deliver quality learning opportunities using LMSs.

### **Parents' Perceptions About Establishing a Technology Learning Institute**

Researchers agreed that both parents and technology are critical factors in promoting students success (Altschul, 2011; Tosun & Baris, 2011). Epstein's (2011) parent involvement model involves six different type of parent involvement, which are parenting, communication, volunteering, learning at home, decision-making and engaging community. This study focused on the construct of learning at home because school administrators have implemented LMSs in schools designed for parents to assist students at home.

According to Epstein (2011), learning at home involves school leaders offering opportunities that invite family interaction with children about curriculum-related tasks. For this study, an extension to learning at home included school leaders provision of information and ideas that will facilitate active parent-child learning experiences. The data revealed that all participants believed that the establishment of a learning institute

would provide opportunities for them to learn the skills necessary to use LMS successfully. This finding indicated that a greater opportunity exists to increase the partnership between parents and school leaders. Epstein further posited that successful schools are influenced by three overlapping spheres, which are parent, school, and community working as partners. Epstein argued that consistent interaction between parents and school leaders is essential in creating a successful partnership. Epstein's (2011) model guided the construction of the research questions and the interview protocol. In the current study, the results revealed that the level of interaction between the participants and school leaders about LMS was insufficient to build a robust partnership. The current research sets the groundwork for exploring how administrators can elevate the level of adoption and increase parents' involvement in using LMS. The principal findings of this research are that parents faced challenges and lack the support needed to be successful co-educators. Therefore, this research provided a rationale for establishing a technology learning institute to develop parents' confidence, mindset, attitude, and skills using LMSs.

### **Limitations of the Study**

Given the diverse nature of the study, several limitations occurred. This study took place in a small suburban school district and included a limited number of parents. Participants were from three geographical locations that served the three lowest performing schools in the targeted school district. As a result, parents' experiences were not representative of all parents who have students at risk but who are not using LMSs.

Another limitation was that no male participants participated in this study. Consequently, the findings only included the views of female participants. However, Marshall and Rossman (2011) posited that gender has little significance on individuals' responses. Given the assertion that gender has little effect on participants' responses, the lack of male participants would not have negatively affected the results of the study.

The data collected, and the findings provided insight into parents' lived experiences and challenges pertaining to the impact of orientation practices on implementing technology and challenges faced by parents on the acceptance and use of technologies introduced by school leaders. Conversely, I could not authenticate the experiences of individuals who demonstrated a reluctance toward using LMSs outside the parameters of this study.

The research provided in-depth insight and a comprehensive exposition of the challenges parents faced in using LMSs and the effect of orientation and training on implementing technologies. Participants embraced the possibility of launching parent training sessions to equip parents with the skills and a deeper understanding of the benefits derived from using the LMS. Parents noted that the development of training workshops, initiated by the school, would enhance their comfort level in using the LMS and alter their current mind-set toward accepting and using technology more readily.

### **Recommendations**

The research finding revealed some challenges and underlying factors that affected parents' use of LMSs. The data collected highlighted that most participants lacked the confidence needed to use the LMSs efficiently; as a result, the parents were

indifferent to technology use. Parents indicated that an increase in confidence would boost participation in technology use.

Some parents expressed that both technology and pedagogical skills were necessary to be involved parents as it pertained to helping students with home assignments via technology. One benefit that could encourage and boost the morale of the parents is to provide training workshops for parents that would develop both pedagogical and technological skills. However, school leaders should consider the scheduling of such training, as parents expressed concern regarding the meeting times.

Also, the data showed that participants felt that the level of support for using the technology was inadequate. If one of the objectives of school leaders is to get parents involved by assisting students at home, then it is critical that parents receive support in developing meaningful involvement. A recommendation is for school leaders to provide parental support by creating a network of support through community-based groups that will facilitate an exchange of ideas, information, and problem-solving access that support parents' questions and challenges. Parental support can have a positive effect on building confidence and competency (Fernald et al., 2017).

### **Recommendation for Intervention and Future Research**

Based on the current study research findings, I recommend that administrators established a technology learning institute. This learning institute would address the nuances relative to the study results. This initiative would aim to provide parents with the needed support and training in using LMSs. Also, school administrators would have an opportunity to develop a comprehensive understanding of the difficulties parents are

experiencing. The implementation of this plan would serve as an intervention based on the current study's results.

Future research relevant to the intervention I proposed, could involve assessing the effectiveness of training on parents' mindset, acceptance, and use of LMSs after exposure to structured training sessions. A case study design would be suitable for this research. A case study would provide the administrators, within this school district with empirical data about the sustainability of the intervention and the continuation of LMS usage as a parent involvement initiative. Case study designs enable a researcher to target specific participants bounded within a particular setting (Creswell, 2007). Also, I conducted this study in a small suburban school district using a small sample size of six participants. Therefore, the results cannot be generalized. Future research could explore an urban school district or different geographical region with larger sample size. Finally, a mixed method approach would be suitable to collect the data for future study. The quantitative method would provide numerical data to evaluate the level of effectiveness, while the qualitative approach would provide a thick and rich description of the participants' experiences.

### **Implications**

According to the *Walden University Student Handbook* (Walden University, 2015), positive social change is a methodical process that involves the application of approaches, ideas, and actions that enhance both social and human conditions. The current research contributes to a positive social change in several ways. First, educators



can gain insight into challenges that parents faced in using LMSs that they can use to plan and implement learning platforms for parent involvement.

A paradigm shift in schools' orientation and training practices that addresses parents' technological needs will influence positive social change. Both parents and educators should benefit from such a change. Parents who have their needs met should develop confidence, trust, a more profound sense of partnership with the school, and increased self-worth.

Educators should experience an increase in students' performance. Altschul (2011) emphasized that parents' input is the most effective intervention for students' increased performance. Legislators could use the findings to initiate conversations toward policies to address appropriate measures for the implementations of training at schools that will develop the technology skills of parents, especially those with students deemed at risk.

Kaufman, Oakley-Browne, Watkins, and Leigh (2003) indicated that change is a process; therefore, each component of the change effort must have the support needed to be successful. Parents want to help, but the challenges they encounter hinder their success. This research revealed the need for parents' development in technology skills and changes in school leaders' approach to orientation and training in implementing emerging technologies such as LMSs. Technology develops quickly; therefore, the need for continued improvement of technology skills to meet individual needs is ongoing. Providing a platform for parents to voice their lived experiences about their reluctance to

using LMSs has illuminated some areas of concern that need addressing if parent involvement through the use of technology such as LMS is to be successful.

### **Conclusion**

Many school leaders have taken the initiative to implement technology as a significant part of school improvement plans, with the hope of developing a robust parent involvement partnership. More educators are relying on this partnership to assist in promoting an increase in academics, in particular for students identified as being at risk of academic failure. Research has indicated that technology implementation for at-home involvement is a step in the right direction if students are to improve and become global competitors. However, technology implementation is a process that involves deliberate action and strategic planning by implementers if empowerment is to occur.

The study findings indicated that lack of parents' empowerment was one of the biggest problems; therefore, educators must provide an enriching experience that will alleviate or minimize some of the challenges that parents experience. Common overarching themes regarding the phenomenon of parents of at-risk students who do not use LMSs that emerged from the data were parents' lack of knowledge about accessing and navigating the LMS, ineffective orientation practices, lack of technical support, and lack of support for training. Both individual and organizational hindrances to technology use emerged based on the research findings.

Parents felt that they did not possess the skills needed to support their children confidently and efficiently on the online platforms provided by educators. Parents indicated that school leaders did not provide adequate orientation and training, which

ultimately prevented them from using the programs implemented. It was also the perception of parents that the provision of specific training in handling LMSs would enhance their ability to become more confident and involved.

Parents are an invaluable resource, and the onus is on school leaders to provide the equipment that will bridge the academic gap students are experiencing and to ensure parents can use the resources to create meaningful experiences for their children. This provision may involve creating plans that inculcate ground-breaking approaches that will educate and support parents and empower them as co-educators.

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## Appendix A: Interview Protocol

### Interview Protocol: The Non-Use of Learning Management Platform

Time of Interview:

Date:

Place:

Interviewer:

Interviewee:

Position of Interviewee:

#### **Questions:**

1. What are your views as it relates to using technology as a major part of building academic skills for your child, at home?
2. How would you describe a typical day of helping your child at home using LMS?
3. What has been your challenges with using LMS?
4. How have these challenges impacted your decision to continue or discontinued using the LMS?
5. Describe how you became aware of the learning platform and the expectations of using it to help your child at home?
6. How have the orientation and training provided by the school impacted your use or nonuse of the learning platform?
7. How do you feel about the school's expectation of you in helping your child by using online resources?

8. Describe your experiences, pertaining to the support provided by the school in using LMS.
9. How do you think the level of support given in utilizing LMS enhance or hinder your full use of the platform?
10. How do you think the school can support you in using learning management websites more frequently or continuously?
11. If you could make a list, what would be the top four areas that the school could improve upon to help you to understand and use LMS?
12. What are your views on the school providing a place for parents to get training in using LMS?
13. How do you think this could benefit you as a parent?
14. What are some skills that you think would be beneficial?
15. What factors would prevent you from attending this training institute?

## Appendix B: Parent Invitation Letter

December 12, 2016

Hello Parent,

My name is Michelle Landley and I am a doctoral candidate in educational technology at Walden University. I am conducting a research study as part of the requirements of my degree in educational technology, and I would like to invite you to participate in this study. As a parent, you have valuable insights to share.

I am interested in exploring parents' experiences that impact their use of school's online learning platforms, which are designed to help students develop their academic skills at home. To accomplish this purpose, I will describe the parents' experiences that influence their use of the school online learning platforms.

Therefore, the researcher is inviting (a)third, fourth, and fifth grade parents (b) who self-disclosed their child scored at the beginning level on the Georgia Milestone Assessment Test, and use the school's online website no greater than two days per week to participate in a research that examines the use of online learning platforms designed to support students' academic growth. The information from my study will not be shared in any way that could affect you or your child's reputation.

Please read the attached parent consent form carefully because the procedures for participation are explained. You may keep this copy, as you will be asked to sign a new copy at the beginning of the interview, if selected. Please note that not all interested participants will be selected, as selection will be based on using participants with varied demographics. However, you will be notified of the decision taken.

If you have any questions about the study, you may contact me at [michelle.landley@waldenu.edu](mailto:michelle.landley@waldenu.edu) or xxx-xxx-xxxx. Also, if you have questions about your rights as a participant you may contact Dr. Leilani Endicott at xxx-xxx-xxxx or via email at [irb@waldenu.edu](mailto:irb@waldenu.edu).

If you would like to be considered for participation in this study, kindly complete the Self-Disclosed Survey which will be used for the sole purpose of selecting participants, complete the bottom portion of this letter, and return both documents to me directly in the self-addressed envelope provided.

Child's grade \_\_\_\_\_

Telephone Number \_\_\_\_\_

email address \_\_\_\_\_



Age group: (13-23) (24-34) (35-45) (46-56) (57-67) (68-78) (over 78)

Respectfully,

Michelle Landley  
Walden University  
Ph.D. Doctoral Candidate

### Appendix C: Self-Disclosed Survey

Please check the response that describe your child's level on the 2015-2016 Georgia Milestone Assessment Test.

- My child did not take the test.
- My child scored a Level 1 on the test.
- My child scored a Level 2 on the test.
- My child scored a Level 3 on the test.
- My child scored a Level 4 on the test.

Please check the response that best describe your use of the school's online learning website.

- I do not use the school's online learning website with my child.
- I use the schools learning website once per week with my child.
- I use the schools learning website twice per week with my child.
- I use the schools learning website three times per week with my child.
- I use the schools learning website four times per week with my child.
- I use the schools learning website five times per week with my child.
- I use the schools learning website six or more times per week with my child.

**\*\*Please note the information provided will only be used for selecting participants for the study.**

## Appendix D: Confidentiality Agreement

**Name of Signer:**

During the course of my activity in collecting data for this research: “The Non-Use of Technological Learning Platforms by Parents of At-Risk Students “ I will have access to information, which is confidential and should not be disclosed. I acknowledge that the information must remain confidential, and that improper disclosure of confidential information can be damaging to the participant.

***By signing this Confidentiality Agreement I acknowledge and agree that:***

1. I will not disclose or discuss any confidential information with others, including friends or family.
2. I will not in any way divulge, copy, release, sell, loan, alter or destroy any confidential information except as properly authorized.
3. I will not discuss confidential information where others can overhear the conversation. I understand that it is not acceptable to discuss confidential information even if the participant’s name is not used.
4. I will not make any unauthorized transmissions, inquiries, modification or purging of confidential information.
5. I agree that my obligations under this agreement will continue after termination of the job that I will perform.
6. I understand that violation of this agreement will have legal implications.
7. I will only access or use systems or devices I’m officially authorized to access and I will not demonstrate the operation or function of systems or devices to unauthorized individuals.

***Signing this document, I acknowledge that I have read the agreement and I agree to comply with all the terms and conditions stated above.***

**Signature:****Date:**

## Appendix E: Homeowners' Association Letter of Cooperation

November 27, 2016

Dear Ms. Landley Lee,

Based on my review of your research proposal, I give permission for you to conduct the study entitled, *The Non-use of Classroom Learning Platform by Parents of At-risk Students*, within the (Neely Manor Subdivision). As part of this study, I give permission to select and interview parents as it pertains to collecting data. I am also acknowledging that the Homeowners' Association personnel are not expected to carry out any supervisory work. Individuals' participation will be voluntary and at their own discretion.

We understand that our Association's responsibilities include: informing the researcher of the next schedule Homeowners Association Meeting to disseminating invitation letters and surveys to prospective parents, in an attempt to recruit participants who, have children that are at-risk of academic failure, and have not actively used the learning management platforms provided by their child's schools within the community. Name of community reserve the right to withdraw from the study at any time if our circumstances change.

The student will be responsible for complying with our association's policies and requirements, including all ethical procedures and guidelines.

I confirm that I am authorized to approve research in this setting and that this plan complies with the Association's policies.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the student's supervising faculty/staff without permission from the Walden University IRB.

Sincerely,