

MOBILE LEARNING AMONG STUDENTS IN A PRIVATE, TITLE I HIGH SCHOOL: A  
PHENOMENOLOGICAL STUDY

by

George Lasley III

Liberty University

A Dissertation Presented in Partial Fulfillment

of the Requirements for the Degree

Doctor of Education

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## ABSTRACT

The purpose of this phenomenological study was to understand the perceived impact of using mobile learning to improve the academic achievements of low-income, private high school students. My Christian faith and emphasis on students' educational development were strong contributors to the study's purpose. The theory guiding this study was the technology acceptance model. This framework helped explore the perceived impact that mobile learning had among low-income, private high school students. The central question was: What is the lived experience of low-income, private high school students using mobile technology in class? Subquestions were used to explore the academic, personal, and social benefits of using mobile technology in the classroom with low-income, private high school students who accepted technology as a benefit for learning. Moustakas' (1994) phenomenological research data collection method was used as a guide for gathering data from the lived experiences of low-income, private high school students. Data sources included interviews, focus groups, and photovoice. The data analysis created the study's triangulation and thematic saturation. Four themes emerged from the data collected, and included reduce stress, need for creativity, benefit of mobile technology, and disadvantages of using mobile technology. The student participants addressed their displeasure about specific academic environments that they felt contributed to their lack of academic motivation. The participants explained mobile learning would create a student-engaged learning environment. However, teacher readiness, distraction, and cheating were the perceived disadvantages.

*Keywords:* Mobile learning, perceived impact, academic achievements, unmotivated, private, low-income, high school students

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### **List of Abbreviations**

Applications (Apps)

Behavioral Intention (BI)

Information System (IS)

Institutional Review Board (IRB)

Perceived Ease of Use (PEOU)

Perceived Usefulness (PU)

Personal Computer (PC)

Technology Acceptance Model (TAM)

Low-Income Private High School (LIPHS)

## CHAPTER ONE: INTRODUCTION

### Overview

Many students in U.S. Title I schools are struggling with academic motivation (Hirn et al., 2018; Kainz, 2019). Subsequently, students are leaving education early (Dupéré et al., 2018; Jia et al., 2016; Sum & Harrington, 2003). To minimize this struggle, stakeholders in secondary education should consider the effects of using mobile learning in the classroom with low-income, private high school students (LIPHS) to improve their effort to learn.

Mobile learning involves getting students to see learning as interesting, and one benefit is that most students are interested in mobile devices (Sanakulov & Karjaluo, 2015). As such, students benefit academically and personally when a learning process is engaging (Baek & Touati, 2017; Chen et al., 2016; Gangaiamaran & Pasupathi, 2017). Furthermore, students gain valuable academic and personal learning experiences from a self-regulated environment (Kizilcec et al., 2017; Knowles, 1984; Martin, 2004), which teachers can structure with mobile technology.

As the researcher, I sought to examine the perceived impact of mobile learning within a classroom setting with self-identified LIPHS students. Mobile learning provides students the opportunity to access information quickly with an accessible electronic device (Taherdoost, 2019; Yüksekdağ, 2016). Mobile devices can be any computing, portable, electronic device “such as mobile phones, tablets, smartphones, and e-readers, [used] to access learning resources, collaborate, communicate, and share learning experiences” (Oyelere et al., 2018, p. 471). This chapter provides the study's historical, social, and theoretical background, situation to self, problem statement, purpose statement, the significance of the study, research questions, definitions of keywords, and a comprehensive summary.

## **Background**

Title I schools in the United States receive federal funding to improve the academic achievement of disadvantaged students by providing students with a quality education that fits their learning needs (Robinson, 2018). Many students who attend eligible Title I schools are from low-income families (Hirn et al., 2018). Pfister (2018) noted that many researchers linked poverty to low academic achievement. Many students from low-income families lack academic persistence (Cilesiz & Drotos, 2016; Pfister, 2018) and face social challenges (Jia et al., 2016), which hinder their academic learning (Cilesiz & Drotos, 2016; Pfister, 2018). Many private Title I high schools are experiencing a demographic shift in the student population that warrants educators to change teaching methods to affect educational outcomes. Educators of Title I schools should consider the best teaching approach to fit a new population of students (Mahatmya et al., 2016). The teaching methods that are most effective with students from middle-to-high-income families may not be as influential with Title I students (Reinhorn et al., 2017). Different educational policies in private, Title I high schools may confront the academic struggles of impoverished students (Reinhorn et al., 2017) and improve their academic achievements (Pfister, 2018; Reinhorn et al., 2017; Zhao, 2016).

## **Historical Background**

The quality of education in the United States is a concern (Coburn et al., 2016; Koedel et al., 2017). Over the last two decades, educational stakeholders have confirmed an education crisis (Coburn et al., 2016). Several educational acts have been passed to confront the history of underserving low-income students (Freed, 2009). The Elementary and Secondary Education Act of 1965 aimed to improve the educational outcomes of low-income students and reduce achievement gaps (Kainz, 2019; Robinson, 2018). However, supporters of school reform thought

it was necessary to expand the Elementary and Secondary Education Act in 1965 because of the need to give at-risk students an equal opportunity to increase their academic performance (Robinson, 2018). However, the data show that students with low incomes academic performance were linked to the inability to connect with their learning environment (McDermott et al., 2019). As a result, 25% to 30% of students dropped out of school in the 1990s, and over 40% reported being disengaged and unmotivated (Sum & Harrington, 2003). The dropout rate indicates a continuing educational issue (McDermott et al., 2019).

The federal government confronted the academic challenges of Title I students in the United States. The No Child Left Behind Act (2001) was a federal oversight of the education system that attempted to apply provisions for disadvantaged students. Advocates for school reform criticized the No Child Left Behind Act for restricting the state government from improving the educational gaps on the state level (Robinson, 2018). Equality in education continued to be a concern due to the high dropout rates among high school students (Freeman & Simonsen, 2015; Jia et al., 2016). Although dropout rates have decreased among students from low-income families from 1979-2009, in 2009, students from low social, economic status families were still five times more likely to drop out of high school than their high-income peers (Cross et al., 2018).

Even in 2014, one in five public high school students still did not graduate within four years (Jia et al., 2016). Then in 2015, the Every Student Succeeds Act was passed to help decrease the educational learning gaps. The mandate explained that school districts were responsible for locating and intervening in low-performing schools and identifying subgroups of underperforming academic students (Every Student Succeeds Act, 2015; Robinson, 2018). Although more recently, the U.S. high school graduation rate in 2016 reached a new high of

82%, the high school dropout rate is still a major concern because more than 500,000 students drop out of school each year (McDermott et al., 2019).

The data present a current trend in secondary education (Cross et al., 2018; Jia et al., 2016; Sum & Harrington, 2003). Researchers have expressed grave concern for low-income (Jia et al., 2016; Sum & Harrington, 2003) and unmotivated high school students (Cross et al., 2018; Jia et al., 2016; Sum & Harrington, 2003) because they are the most likely to drop out of high school. Students' economic disadvantages have contributed to this historical phenomenon (Oreopoulos et al., 2017). As such, there is a need to incorporate strategies to confront the concerns of at-risk students (McDermott et al., 2019). Interventions that reinforce positives behaviors for low-income students can address their academic performance (Gandhi et al., 2020).

### **Social Background**

An effective learning environment becomes a resourceful tool for students who need the motivation to excel academically (Bandura, 1986; Liu et al., 2012; Mahler et al., 2018).

Conversely, there are social factors that explain the lack of motivation among low-income students. First, at-risk students' mindset can affect their academic achievements and motivation (Nagaoka et al., 2013). At-risk students tend to lack the personal effort, persistence, and attitude to imagine positive outcomes (McCabe et al., 2020). Second, students with language barriers need learning accommodations to help ease the fear of not comprehending subject content and expressing themselves (Koseki, 2017).

Third, processing information presents challenges for low-performing students who struggle with decision-making (Sandberg, 2020). Creating a learning environment that enables students to process information at their pace will benefit students' ability to learn. Fourth, students' economic, social status is a key predictor of the students' academic achievements. For



example, research indicates that family support is a critical issue (Sandberg, 2020). Owens (2018) asserted that financial factors influence students' learning success. Therefore, finding an educational practice that considers the social characteristics of low-performing students will impact unmotivated high school students' desire to learn (Bandura, 1986; Liu et al., 2012; Mahler et al., 2018). Integrating mobile technology is an alternative educational approach that benefits students' social needs (Sharples et al., 2009).

### **Theoretical Background**

The technology acceptance model (TAM) derived from Ajzen and Fishbein's (1975) theory of reasonable action (TRA; Buabeng-Andoh, 2018; Taherdoost, 2018). The fundamentals of TRA help explain the user's behavior of adopting new technologies (Buabeng-Andoh, 2018). TRA can identify the users' perceived usefulness (PU) and perceived ease of use (PEOU) to assess technology. Although TRA inspired the technology-focused application of TAM (Davis, 1989), there are important differences between TRA and TAM due to the determining factor of assessing technology from the user's attitude. TRA combines the two determinants (i.e., PEOU and personal enjoyment (PE) (Ajzen & Fishbein, 1975), while TAM distinctly separates the two elements of PEOU and PE (Davis, 1989; Taherdoost, 2018). The subtle difference supports the reason for choosing TAM as the theoretical framework for this research study.

Despite the most recent modifications of TAM such as the unified theory of acceptance and use of technology which includes other variants like the user's gender, age, experience, and voluntariness of use (Taherdoost, 2018; Venkatesh et al., 2003), TAM is still the most effective theoretical framework for my research study. TAM, developed by Davis (1989; Davis & Venkatesh, 1996), is most influential for describing a person's reason(s) for accepting technology (Naeini, 2012). According to Granic and Marangunić (2019), the two determinants of

TAM that define the users' intention to use technology are PU and PEOU. PU is the realization that emerging technology will increase or improve a person's overall performance, or, in this case, academic success (Al-Emran et al., 2018; Davis, 1989; Joo et al., 2018).

Studies have shown that PU is the most significant factor in predicting accepting or rejecting technology because the subject's PU is the most influential in impacting users' attitude regarding technology (Davis, 1989; Joo et al., 2018). PEOU is the degree to which a user finds a system to be free of effort (Al-Emran et al., 2018; Cheng, 2019; Davis, 1989). Marangunić and Granić (2015) confirmed that PE impacts a person's attitude towards PU. Davis (1989) argued that a person's perception of effort explains the user's likeness to continue using a particular information system.

The use of technology indirectly confronts the challenges that unmotivated students experience in a traditional learning setting (Sharples et al., 2009). There are concerns with using the traditional classroom setting for motivational purposes (Liu et al., 2012; Tjeerdsma, 1995). A learning environment with technology is different from an environment with minimal technology (Sharples et al., 2009) because technology encourages active learning (Tjeerdsma, 1995). Learning models that allow students to be interactive with learning (Sumak et al., 2017) enable students to retain knowledge and skills (El-Sofany & El-Hagggar, 2020). Mobile learning can be essential for LIPHS students (Liu et al., 2012; Mahler et al., 2018).

### **Situation to Self**

As an urban educator, administrator, and counselor, I have experienced motivating students to learn in the public and private sectors. My interest in private schools comes from personal experiences. Most of my 10 years in education, except the first 2 years, were spent in Christian education. I spent the first 2 years working at a public behavioral reassignment school

in Milwaukee, Wisconsin. My experiences encouraged me to help students who lack academic skills. Assisting unmotivated students to learn basic skills has been my greatest challenge. I have seen that unmotivated students tend to be disruptive, fail, or become dependent on others to attain academic success.

My unpublished undergraduate thesis explained the need to inform educators how to assist urban students in learning. It showed that the type of resources educators choose can increase students' knowledge and motivation (Liu et al., 2012; Mahler et al., 2018). I wrote this thesis before I gained classroom experience. I am convinced that more attention is needed regarding the technological platform in which students learn. This research presents the role and importance of using technology to motivate students in ways that a traditional classroom setting cannot.

I bring several philosophical assumptions to this research. The most critical philosophical belief concerns my Christian faith in Jesus Christ. My faith and conviction influence how I view and interpret the world. Christian education provides students with spiritual and philosophical advantages. My spiritual view is that educators have a spiritual assignment from God, and that all students can learn through faith, despite their geographical, economic, racial, or ethnic identity (Tjeerdsma, 1995).

I bring other philosophical assumptions into this research. First, the field of education and its stakeholders is essential for the well-being of every student, and there is a need to teach every student with the most effective educational approach. Second, I believe that addressing *how* students learn is just as important as *what* they learn. Educators can help students retain information because educators influence what and how students learn. Third, educators have a particular task to guide students according to their ability because all students can learn. My

primary focuses are to improve high school students' learning experience and advance secondary education.

Second, motivated high school students are more likely to perform better than students who are unmotivated to learn. A structured learning environment that encourages participatory learning is essential for at-risk students. Therefore, there is an urgent need to develop a learning environment that fosters academic growth. I have noticed that most high school students use mobile devices for personal needs, and integrating technology in the classroom can have a positive impact on students' motivation to learn academic skills.

Third, a private high school learning environment should prepare students for success. Mobile learning can provide students with critical thinking and self-reliance skills. Students without personal and academic readiness to succeed are in danger of failing. Even more concerning, students who are unable to think critically are more reliant, causing many unmotivated students to give up without the presents of others. Using mobile learning in a school setting will provide students with lifelong learning skills that impact their academic and personal development.

My fundamental beliefs and assumptions that relate to the qualitative perspective, according to Creswell (2018), include the following:

- My ontological assumption is that a person's perception of reality comes from their experience. Therefore, it is important to structure a learning environment that influences students' perceptions of education.
- My epistemological assumption is that everybody knows how to learn when given the right tools. Therefore, education has an essential responsibility to create a

learning environment that enables students to process information with a learning style that best fits their personal, social, and academic needs.

- My axiological assumption is that everyone has value and purpose because they are a child of God. Therefore, students in Title 1 schools deserve the most up-to-date education that uses modern technology that will equip them for future success.

Regarding my paradigm, I am a social constructivist. Understanding reality through interpretation is part of my mental and social identity. Each interpretative framework seeks to find and interpret a more profound understanding of the research's phenomenon. My social constructivist side aims to affect the participants in their community, and my pragmatist identity seeks to impact and influence research with a learning theory (Creswell & Poth, 2016). Both ideologies reflect my Christian identity because they influence how I analyze the societal aspects of people's conditions and ethically conduct research.

### **Problem Statement**

The problem is that high school students in Title I schools have academic concerns (Kainz, 2019) and, as a result, drop out of school (Dupéré et al., 2018; Jia et al., 2016; Sum & Harrington, 2003). Statistical data indicate that students from impoverished backgrounds have more significant academic challenges than their peers from a higher economic status.

Approximately 12% of schools contribute to the dropout rate. Studies have shown that low-income students have consistently higher dropout rates than their counterparts (Jia et al., 2016).

There are negative consequences for students who drop out of high school. Students who do so risk the potential of remaining in poverty from the lack of employment income. Individuals without a high school diploma or a General Education Development certificate will lose approximately \$690,000 over a lifetime (McFarland et al., 2018). Low-income students need

academic support to foster their academic and personal development (Gandhi et al., 2020). Recent research has not indicated the impact mobile learning can have on this student demographic (Adel & Rafie Mohd Arshad, 2018; Al-Emran et al., 2016; Chaka & Govender, 2017; Dashti & Aldashti, 2015). Mobile learning has the potential of preventing students from dropping out of high school because mobile learning helps improve students' academic achievements results by helping encourage students to remain engaged with their learning (Klimova, 2019).

### **Purpose Statement**

The purpose of this transcendental phenomenological study was to determine the perceived impact that mobile learning has on low-income, private high school (LIPHS) students at a regionally accredited high school located in the Midwestern United States in the hopes of preventing students from leaving school early. I consulted their lived experiences to explain why LIPHS students feel academically uninterested in learning and to provide a solution. The TAM is the theoretical framework that guided the study. The theoretical approach helped explain how students perceive the impact of using mobile technology in the classroom to improve intrinsic and extrinsic motivation to learn academic skills (Cheng, 2019; Horton et al., 2001). The aim was to identify findings that could enhance Title I schools' academic achievements.

### **Significance of the Study**

There are three types of significance to this research study. Each of the categories explains relevant information that pertains to the purpose and reason for the study. The theoretical, empirical, and practical significances provide a thorough explanation of the study's framework, literature, and how stakeholders can apply the results to real-life scenarios. The importance of each addresses the phenomenon of this research study, which is identifying the

benefits of using mobile learning within an educational setting among high school students from lower-economic families.

### **Theoretical Significance**

There are many studies on mobile learning (Adel & Rafie Mohd Arshad, 2018; Al-Emran et al., 2016; Chaka & Govender, 2017) that explain the benefits of using technology (Alrasheedi & Capretz, 2018; Kizilcec et al., 2017; Sanakulov & Karjaluoto, 2015). Researchers such as Davis (1989), Davis and Venkatesh (1996), and Wu and Chen (2017) noted that TAM is reliable for predicting if the user will adopt technology from testing the user's perceived usefulness of the Information System (IS). This study explored student perceptions on the impact of using mobile learning to improve academic learning (Bano et al., 2018; Chen et al., 2016; Crompton & Burke, 2018; Rataj & Wojcik, 2020; Sung et al., 2016) and social development (Adel & Rafie Mohd Arshad, 2018; Alrasheedi & Capretz, 2018; Chaka & Govender, 2017).

Some studies have refuted the significance of using technology, citing its ineffectiveness (Montrieux & Schellens, 2018; Rataj & Wojcik, 2020; Statti & Villegas, 2020). Despite these studies' findings, there is a lack of emphasis on the impact of using mobile learning in Title I schools. Evaluating the impact of mobile learning among Title I students is vital (Jin & Sabio, 2018) since Title I students face academic and social challenges (Cilesiz & Drotos, 2016; Jia et al., 2016; Pfister, 2018). There are alternative educational methods to reduce Title I students' academic and social risks of becoming unmotivated, failing, and dropping out of high school (Kainz, 2019). Mobile learning is an educational method that can help Title I high school students achieve academic success (Jin & Sabio, 2018).

### **Empirical Significance**

This study adds to the current body of literature about mobile learning (Aleven et al., 2016; Nikou & Economides, 2018; Zydney & Warner, 2016). Previous research has highlighted the challenges that students from low-income families experience in education (Anderson, 2018). Students' dropout rates and lack of motivation to learn are some of the results of coming from an impoverished family (Anderson, 2018; Dynarski et al., 2018). This research also helps to present critical information that affects students' learning (Nikou & Economides, 2018). The students' lived experiences have the potential of impacting future research.

### **Practical Significance**

This study examined if mobile learning can improve the academic performance of LIPHS students and increase students' motivation to learn in an educational setting. The study provides essential practical significances for administrators, teachers, and students because the results offer teaching methods to improving teachers' effectiveness and instructional practices in Title I schools. Administrators may gain knowledge regarding understating the best instructional design for mobile learning (Statti & Villegas, 2020). Practical knowledge about the strengths and weaknesses of incorporating mobile learning in an educational setting can help develop the best ways to integrate technology to confront students' educational challenges and the perceived disadvantages of using mobile learning (Chee et al., 2017). Teachers may gain valuable insight about how to incorporate mobile learning (Christensen & Knezek, 2017b) that helps impact students' learning (Al-Emran et al., 2016; Rataj & Wojcik, 2020). LIPHS students may also benefit from using technology in the classroom because using technology improves learning (Sharples et al., 2009). Society is becoming a technological culture in which students must adapt for success in everyday life (Sharples et al., 2009).



## Research Questions

**Central Research Question:** What is the lived experience of low-income, private high school students using mobile technology in class?

The study explored the perceived impact that mobile learning has on self-identified LIPHS students by using the TAM theoretical framework to assist in the research study. The lived experiences gathered created an intense focus on developing students' perceived knowledge and conscious thought (Creswell, 2018, p. 82). Recent literature and interpretive frameworks have presented the need to incorporate strategies to solve educational problems (Creswell & Poth, 2016) because students from low-income families are personally affected (Jia et al., 2016). High school students are more likely to drop out because of their lack of motivation and economic status than students motivated to learn from a different social-economic class (Jia et al., 2016; Nowicki et al., 2004).

**Subquestion One (SQ<sub>1</sub>):** What is the academic impact of using mobile technology in the classroom among low-income, private high school students who accept technology as a benefit for learning?

The results of the lived experiences explained how to motivate LIPHS students. TAM provided structure for the study's question to understand how mobile technology meets students' academic needs and improve motivation (Cheng, 2019; Horton et al., 2001). Researchers have found that technology can influence students' productivity and efficiency (Chase et al., 2018; Hung et al., 2018; Karanfiller et al., 2018; Klimova, 2018). In addition, the effects of using technology can improve students' perceived intrinsic ability to learn (Ahn et al., 2019; Sanakulov & Karjaluoto, 2015).

**Subquestion Two (SQ<sub>2</sub>):** What personal or social benefits will low-income, private high school students who accept technology as a benefit for learning receive from using mobile technology in the classroom?

Learning how to use mobile learning in the classroom is vital. The answer to this question explained the non-academic advantages of using mobile learning with LIPHS students. The results about how to motivate LIPHS students are indispensable to the personal and social success of students (Liu et al., 2012). Learning how intrinsic motivation impacts LIPHS students potentially assists with teaching other student groups how to receive intrinsic motivation. The benefit of intrinsic motivation is how it can improve the quality of learning and students' creativity (Ryan & Deci, 2000). The TAM theoretical model provided a framework that helps with exploring the importance of the usage of technology (Cheng, 2019).

### **Definitions**

Essential definitions as used in this study are below.

1. *At-risk high school students* - Students who frequently live in low socioeconomic communities. Five demographic indicators are commonly found in at-risk students: social-economic class, race or ethnicity, family structure, parental education, and proficiency in English (Nowicki et al., 2004).
2. *Extrinsic motivation* - External motivation comprises external behaviors that produce future outcomes (Ryan & Deci, 2000).
3. *Intrinsic motivation* - Intrinsic motivation comes from personal enjoyment (Gan & Balakrishnan, 2016; Ryan & Deci, 2000).
4. *Low-income high school students* - Low-income high school students are a population of students who may lack basic learning needs (Cilesiz & Drotos, 2016).

5. *Mobile learning* - Mobile learning offers students the opportunity to engage in asynchronous instruction (Chee et al., 2017) with a wireless handheld portable device to learn (Patton, 2002; Traxler, 2007).
6. *Mobile technology* – Includes “mobile phones, tablets, smartphones, and e-readers, to access learning resources, collaborate, communicate, and share learning experiences” (Oyelere et al., 2018, p. 471).
7. *Title I School* - Title 1 schools in the United States receive federal funding to improve academic achievement for disadvantaged students. Many students who attend schools eligible for Title 1 funding are from low-income families (Hirn et al., 2018).
8. *Traditional classroom setting* - The conventional classroom setting uses lectures and secondary material (Bralić & Divjak, 2016).
9. *Unmotivated students* - Unmotivated students underachieve academically from lack of effort (Hidi & Harackiewicz, 2000).

### **Summary**

The number of unmotivated high school students is a concern (Erik et al., 2011). Many LIPHS students either enter high school unmotivated or become unmotivated for various reasons. Adolescents experience many transitional shifts in their lives, and those circumstances hinder students' learning ability (Washor, 2018). Recent research presented limited insight concerning the perceived impact that mobile technology has on LIPHS students. Adel and Rafie Mohd Arshad (2018), Chaka and Govender (2017), and Cilesiz and Drotos (2016) addressed mobile learning among college students. Anderson (2018) mentioned mobile learning among students in early childhood education. However, recent studies overlook an essential age group and subculture that constitutes a major societal and academic issue. Additional research about

advancing students in Title I high schools is important, and without studying and potentially utilizing the effects of mobile learning among LIPHS students, this vulnerable population will remain at risk of dropping out.

## **CHAPTER TWO: LITERATURE REVIEW**

### **Overview**

Chapter Two provides the study's theoretical framework and the current literature on mobile technology among student learners. The Technology Acceptance Model (TAM) is the study's theoretical framework. Davis (1989) developed TAM to understand the user's perception of technology (Davis & Venkatesh, 1996). Using this theory assisted in revealing the effects of mobile learning by using low-income, private high school students' (LIPHS) lived experiences. Students' perceptions of mobile learning highlighted how and why mobile learning is a desirable learning technique.

The literature review presents information on how technology can improve LIPHS students' academic interest in learning and, subsequently, their academic performance. Many LIPHS students face the challenge of being unmotivated to perform at a high academic standard. Also, a lack of academic or social skills could attribute to low-income students' academic learning failures (Nikou & Economides, 2018). Nowicki et al. (2004) argued that socioeconomics affects at-risk students' intrinsic and extrinsic motivation to achieve academically. My research indicated the deficiencies of academic skills in students with social, economic, and educational challenges and offer a solution for those challenges. A comprehensive summary of the literature review concludes the chapter.

### **Theoretical Framework**

The TAM, which was developed by Davis (1989; Davis & Venkatesh, 1996), is most influential for describing a person's reason(s) for accepting technology (Naeini, 2012; Wu & Chen, 2017). Davis and Venkatesh (1996) asserted that organizations could not improve emerging technologies without assessing potential users. TAM's structure has specific theoretical

origins presenting how the model assesses potential users' perceptions of technology (Buabeng-Andoh, 2018).

Buabeng-Andoh (2018) and Taherdoost (2018) explained how the TAM is derived from Ajzen's and Fishbein (1975) theory of reasonable action (TRA). The fundamentals of TRA help to explain the user's behavior of adopting new technologies (Buabeng-Andoh, 2018). TRA can be used to prioritize the perceived ease of use (PEOU) and personal enjoyment (PE) as part of the users' likeness to adopt the technology. Although TRA inspired the technology-focused application of TAM (Davis, 1989), because of the determining factor of assessing technology from user's attitude, there are important differences between TRA and TAM. TAM separates the two elements of PEOU and PE (Davis, 1989; Taherdoost, 2018). However, TRA combines the two determinants (i.e., PEOU and PE; Ajzen & Fishbein, 1975). The distinction supports the reason for choosing TAM as the theoretical framework for this research study.

Despite the most recent modifications of TAM, such as the unified theory of acceptance and use of technology which includes other variants like the user's gender, age, experience, and voluntariness of use (Taherdoost, 2018; Venkatesh et al., 2003), TAM is still the most effective theoretical framework for my research study. The TAM theoretical framework helped precisely determine LIPHS students' perception using mobile learning to enhance educational practices in the classroom. Also, the complete details of TAM assisted in explaining the user's future intention of using mobile learning.

### **Technology Acceptance Model Constructs**

Figure 1 presents the TAM and how it is a system of constructs with specific purposes. The four constructs of TAM (PU, PEOU, intent to use [ITU], and actual use [AU]) are essential for understanding the perception and intention of using new technological discoveries (Davis &

Venkatesh, 1996). According to Granić and Marangunić (2019), PU and PEOU are the two most important constructs while separately explaining the behavioral intention to use (Davis, 1989; Taherdoost, 2018).

### ***Perceived Usefulness***

Perceived usefulness is the realization that emerging technology will increase or improve a person's overall performance, or, in this case, academic success (Al-Emran et al., 2020; Al-Emran et al., 2018; Davis, 1989; Joo et al., 2018). Studies have shown that perceived usefulness is the most significant factor in predicting or rejecting technology because the subject's PU is the most influential in impacting a person's perception of using technology (Davis, 1989; Joo et al., 2018).

### ***Perceived Ease of Use***

Perceived ease of use is the degree to which a user finds a system to be free of effort (Al-Emran et al., 2018; Cheng, 2019; Davis, 1989). Marangunić and Granić (2015) confirmed that users' PEOU impacts the subjects' attitudes towards their PU. Davis (1989) argued that a person's perception of effort explains the user's likeness to continue using a particular information system

### ***Behavioral Intentions***

Behavioral intentions are a combination of the information that one gathers from the two previous constructs; PU and PEOU (Davis, 1989). The results of BI explain the attitude of the user (Joo et al., 2018). Thus, when PU and PEOU are positive, users are more likely to use the technology in the future (Cheng, 2019; Davis, 1989; Joo et al., 2018). TAM can also provide explanations for behavior intentions (Buabeng-Andoh, 2018) by including the users' reasons for

accepting or rejecting a particular technology system (Davis, 1989; Davis & Venkatesh, 1996; Teo, 2010).

### ***Empirical Studies***

Empirical studies validate that TAM is a suitable model for explaining users' intention to use technology (Cheng, 2019; Marangunić & Granić, 2015; Teo, 2010). For example, studies have used TAM to investigate users' beliefs, attitudes, intentions, and behaviors to determine the subjects' perception of technology (Davis & Venkatesh, 1996; Joo et al., 2018; Marangunić & Granić, 2015). In addition, the framework of TAM has been used to express how to improve the user's perception of technology (Buabeng-Andoh, 2018; Joo et al., 2018; Marangunić & Granić, 2015). There have also been numerous studies focusing on new emerging technologies, including but not limited to the usage of smartphones in an educational setting (Heath, 2017; Simmons & Martin, 2016; Yang, 2005).

External variables are essential for a researcher who evaluates technology (Chang et al., 2017; Hwang et al., 2018; Sanchez-Prieto et al., 2016). User enjoyment is among the most influential external variables influencing perception (Abdullah et al., 2016). A system's enjoyment has a significant impact on users' intention to adopt a behavior. The users' acceptance of technology relates to their intention to receive an enjoyable experience. Perceived enjoyment can help predict users' future intentions (Ali & Arshad, 2016).

In conclusion, mobile learning is a continuing phenomenon (Kearney et al., 2012) and has become an integral part of engaging student learners (Schuck et al., 2010). Research has sought to understand the best non-conventional learning styles by conducting studies with students (Kay, 1972). The study presents the effects of mobile learning among LIPHS students. The theoretical analysis of mobile learning gave my study a foundation on which to expand.



According to researchers Al-Emran et al. (2018), Davis (1989) and Joo et al. (2018), findings have indicated that emerging technology can improve LIPHS students' desire to learn academic skills. The study used TAM to explore the effects of mobile learning among LIPHS students' intrinsic and extrinsic motivation to achieve academic goals. This research presented the conceptualizations and identified the most effective method of using mobile learning.

### **Related Literature**

The literature review presents a synthesis of knowledge about mobile learning, and is significant to this research study because it helps with explaining the need to enrich the educational practice among low-income, private high school students (LIPHS). The significance of studying the impact of mobile learning among LIPHS students is to reduce critical academic challenges that LIPHS students experience in secondary education (Nikou & Economides, 2018). Research shows many students are still at an academic disadvantage due to the lack of available comprehensive resources (Kornhaber et al., 2017). Furthermore, Dynarski et al. (2018) confirmed the students' achievement gap in education is a concern for low-income students. Poverty is a pervasive predictor of students' academic success (Anderson, 2018; Dynarski et al., 2018). Many high school students from low-income families have challenges with their academic performance (Anderson, 2018).

Low-income, private high school students are at an economic and academic disadvantage compared to their peers of a higher economic social class (Cilesiz & Drotos, 2016). Low-performing students are without the adequate resources to help them make academic progress (Cilesiz & Drotos, 2016; Kornhaber et al., 2017). Students who come from affluent neighborhoods tend to perform better in comparison to students from low-income neighborhoods. Students from impoverished backgrounds have psychological distress from poor

relationships (Anderson, 2018). Many low-income students are less likely to have family members to assist them academically (Cilesiz & Drotos, 2016). Furthermore, students from low-income families experience self-control issues, financial distress, influencing students' readiness, behavior, and cognitive development (Anderson, 2018). Students with low cognitive development have low graduation rates in comparison to non-low-income students (Dynarski et al., 2018).

### **High School Dropout Rates**

Meškauskienė and Guoba (2016) and McKee and Caldarella (2016) asserted that dropout rates are critical in secondary education. Scholars have described school dropout as a pervasive personal, social, and economic concern (Latif et al., 2015; McKee & Caldarella, 2016). The education issue has relevant consequences for students dropping out. Dropout rates negatively affect the learning community because the students who drop out tend to have lower literacy rates (Latif et al., 2015). Subsequently, dropout rates economically affect communities as the result of inadequate preparation for employment (U.S. Bureau of Labor Statistics, 2017).

Education in the United States should be equitable for all students (Baker et al., 2018), but statistical data from current research show the disparities between different ethnic groups (Blazer & Gonzalez Hernandez, 2018). Irwin et al. (2021) reported that in 2019, American Indian/Alaska Natives from the ages of 16 through 24 were the most likely ethnic group to leave high school early with the highest dropout percentage of 9.6%. The Hispanic student population was second with a 7.7% dropout rate. The Black student population followed with a dropout percentage of 5.6%. White students dropped out at a rate of 4.1%, and Asian students had the lowest percentage at 1.8%.

Research also showed that male students were more likely to drop out in comparison to female students. The data indicated that in 2017 male students exceeded the female student dropout rate by 2%, except for those of Asian and Pacific Islander descent (McFarland et al., 2018). The comparison for race and ethnicity reveals that 8% of Black males dropped out in comparison to Black females with a nearly a 5% dropout rate; Hispanic males had a 10.0% dropout rate in comparison to Hispanic females with a 6.4% dropout rate; American Indian/Alaska Native males dropped out at an 11.6% rate in comparison to American Indian/Alaska Native females with an 8.5% dropout rate; and White males had the lowest dropout rate with a 4.9% dropout rate in comparison to White females with a 3.6% dropout rate (McFarland et al., 2018).

Irwin et al. (2021) reported that the overall dropout rate has decreased in recent years, but the current number of students leaving secondary education presents a critical issue (Cross et al., 2018; Jia et al., 2016; Sum & Harrington, 2003). The current dropout rates indicate an educational concern for secondary stakeholders (McDermott et al., 2019). McDermott et al. (2019) asserted that more than 500,000 students drop out of school each year. More recently, research showed that in 2019, more than 2 million students from the ages of 16 and 24 left school early (Irwin et al., 2021). The continual dropout rates among ethnic groups indicate the need to consider why students drop out (Campbell, 2015).

Oreopoulos et al. (2017) argued that secondary students' economic and social development have contributed to this historical phenomenon. Scholars have asserted low-income students have a larger propensity of dropping out (Jia et al., 2016; Sum & Harrington, 2003). Researchers argued that these students lack the motivation to excel academically, prohibiting their academic success (Cross et al., 2018; Jia et al., 2016). The information indicates that the

students who are not interested in performing well in school are in danger of dropping out. Researchers have indicated that poor academic performance and poverty contribute to students' motivation to leave school early (Meškauskienė & Guoba, 2016; Ticușan, 2016; Zaff et al., 2016). Glenn et al. (2016) confirmed that income disparity is an economic concern for student learners.

### **Legislations Enactments to Confront Challenges with Low-Performing Schools**

Notable federal legislation was enacted to improve low-performing schools with economically disadvantaged students (Robinson, 2018). Title I: Elementary and Secondary Education Act (ESEA) of 1965, No Child Left Behind (NCLB), and Every Student Succeed Act (ESSA) are vital enactments (Every Student Succeeds Act, 2015; Kainz, 2019; Robinson, 2018). The policies are instrumental in effecting change and transforming secondary education in the United States by providing resources that meet the needs of at-risk students (Robinson, 2018). Diarrassouba and Johnson (2014) asserted that the primary role of Title I is to achieve fairness and equitability in secondary education.

Robinson (2018) indicated concerns with the ESEA Law and the commendable effort of helping disadvantaged children in high-poverty schools. The ESEA federal grants for school reform have not always benefited students. Some school districts receive financial gains without allocating the resources to the areas of academic concern. The enforcement practices that eliminate schools from justifying salary requirements in comparison to other schools did not ensure the goal of ESEA, which is to allocate resources to provide equitability for low-performing schools (Robinson, 2018).

The NCLB intentions to confront challenging concerns in underperforming schools included several enhancements. First, the enactments of the law demanded that students reach a

minimum proficiency or better in reading and math. Second, these schools needed highly qualified teachers and administrators. Third, learning environments should be safe and conducive to learning, and all students must graduate from high school (Adler-Greene, 2019). However, equality in education was still a concern after the inclusions, and many enactments presented challenges for school administrators (Jia et al., 2016; Robinson, 2018). Finally, the level of accountability from school leaders increased following the NVLB Act (Adler-Greene, 2019).

According to Robinson (2018), ESSA was enacted to revise and replace the NCLB of 2001. Robinson (2018) affirmed that ESSA, which President Obama signed into law in 2015, reauthorized the ESEA of 1965. Significant changes that took effect at the start of the 2017-2018 school year included the dismantling of the federal accountability system and the yearly progress standards. The states' responsibility to create challenging academic content for all subjects and achievement standards for core subjects provide schools with a provision in support of student outcomes (Adler-Greene, 2019).

One of the main goals of the ESSA law is to demand more accountability from school leaders (Every Student Succeeds Act, 2015). According to the Every Student Succeeds Act (2015), the law demands more from school administrators by requiring states to enforce high academic standards in schools, and states are responsible for holding schools accountable of student outcomes. School leaders are also accountable for preparing students for success in college and their career. In addition, principals are liable for creating improvement plans to improve students' current academic success (Adler-Greene, 2019).

### ***High School Leaders Eminent Responsibility from Enacted Legislations***

The intention of the ESSA law presents the vital role and responsibility of school leaders in underperforming schools. School leaders have justifiable pressure to incorporate existing

policies and legislations to confront the challenges of 21<sup>st</sup>-century students (Dhuey & Smith, 2018). School leaders are accountable for upholding and enacting policies that transform low-performing schools into schools that provide a high-quality education for students in underserved communities (Dhuey & Smith, 2018; Mestry, 2017). School leaders of Title I high schools are also under immense pressure to initiate change through accountability and competence of knowing how to meet the demands of at-risk students (Green, 2017). Dhuey and Smith (2018) asserted that the challenge for school leaders with disadvantaged students is greater than non-high-poverty schools. Academic development is a concern among students in disadvantaged sociocultural environments (Mestry, 2017).

The challenge requires leadership to find innovative ways to improve academic achievement gaps (Bloom et al., 2015; Green, 2017). School principals are responsible for changing their schools' desirable academic outcomes and subsequent success (Sezer, 2018; Spillane, 2017). Researchers have asserted that principals are change agents and are instrumental in transforming education by creating effective methods for dealing with critical issues (Green, 2017; Sezer, 2018). School leaders will help high-poverty Title I schools improve student achievement and teacher commitment to offer superior operational success within the classroom to maintain a competitive edge (Green, 2017).

According to Diarrassouba and Johnson (2014), the most viable solution for school leaders is to identify the problem and offer alternative solutions that confront the challenges unique to Title 1 schools. Principals' relevant skills and knowledge to identify problems and offer adaptable solutions to the schools' challenges will prevent school failure (Diarrassouba & Johnson, 2014). In this respect, it is important that the principals have the relevant skills and

knowledge not only in identifying the challenges in their schools but also in addressing them (Diarrassouba & Johnson, 2014; Green, 2017).

Students' academic performances demand school leaders build a school culture that promotes success while providing professional development and growth opportunities for improving teaching and learning (Leithwood & Jantzi, 2006). The preparation involves re-engineering content curriculum, instructional and leadership strategies to improve educational practices, which includes educational tools, learning routines, and structures (Butler & Votteler, 2016; Spillane, 2017). Butler and Votteler (2016) argued that the adequate yearly progress with improvements in curriculum, instructional design, and teaching practices would enable Title schools to receive federal funding; this will provide Title I schools with the necessary resources to meet the academic achievement needs of their student population (Sezer, 2018).

Studies show that school principals' intervention strategies will ensure their students' academic success (Green, 2017). The strategies and methods of responding to the challenges that Title 1 schools in the United States experience are critical to achieving a higher standard education (Diarrassouba & Johnson, 2014). Research showed that focusing on the challenges that principals face as leaders of Title 1 schools will help school leaders find potential solutions to the problems (Diarrassouba & Johnson, 2014). The plans subsequently provide policy makers and stakeholders with school plans for sustainable growth that include intervention plans for inadequate resources, poverty, and the achievement gap. The improvement initiatives should aim to meet the continuous demands of the 21st century (Hung et al., 2020).

### **Marginalization from Traditional Learning Among At-Risk Students**

Educational standards represent a purposeful intent of focusing on instructional practices to improve conceptual learning (Smith et al., 2017). However, there is not a clear consensus

among policy makers and stakeholders of the appropriate course of action of how to confront the educational crisis (Smith et al., 2017). However, there is a need for educational procedures that allow for more equitable outcomes for at-risk students (Tuhkala & Kärkkäinen, 2018). Research indicates the problematic concerns with a traditional learning style (Bowen & Peterson, 2019). Poláková and Klímová, (2019) explained that traditional teaching styles place the teacher at the center of learning, and a traditional learning environment that places teachers as the focal point within a contained location is ineffective because the learning style is inflexible (Bowen & Peterson, 2019).

Teachers within a traditional teaching environment tend to explain a lesson by only using the blackboard or PowerPoint software (Poláková & Klímová, 2019). Wolff et al. (2015) confirmed that traditional learning procedures are troublesome for students who find passive learning boring because passive learning does not require participation. In addition, traditional teaching methods do not individually meet the needs of each student (Mustapha & Kashefian-Naeeni, 2017). According to Mustapha and Kashefian-Naeeni (2017), a considerable shift toward differentiated instruction occurred, expressing the conflict between teachers and school administrators. Many veteran teachers have become comfortable with traditional mindsets and teaching strategies that are not accommodating today's students (Mustapha & Kashefian-Naeeni, 2017; Shirley, 2018; Wolff et al., 2015) by rejecting the efficacy of the mobile learning theory (Bano et al., 2018; Kaliisa & Picard, 2017).

Marginalization does not occur when teachers consider the needs of their students (Aguliera & Nightengale-Lee, 2020). Cardullo (2019) insisted that teachers should consistently adapt to their at-risk students' needs by providing learning opportunities with the integration of technology to bridge the gap between student learners without computers. Aguliera and



Nightengale-Lee (2020) argued that marginalized communities in education have been disproportionately affected by inequitable educational conditions, which often result in negative academic outcomes. Teachers can reduce the marginalization of Title I students by using mobile learning to help differentiate instructions to accommodate students at their different academic levels (Hughes & Yakubova, 2019). Research showed that differentiating class instruction combats learning deficiencies (VanTassel-Baska, 2019). Bouck et al. (2020) and Kabel et al. (2021) asserted that underperforming students develop conceptual educational skills from using technology.

### **Administrators, Educators, and Students Perceptions of Mobile Learning**

Research has indicated that stakeholders are looking for innovative ways for administrators to improve how teachers transfer information to their students (Cardullo, 2019). Thus, the way administrators and educators conceptualize the impact of mobile learning is significant for student achievement (Chaka & Govender, 2017; Chee et al., 2017; Dashti & Aldashti, 2015). Administrators express an interest in using mobile learning as an innovative approach to improve their students' learning outcomes (Alrasheedi et al., 2016). Wishart (2017) argued mobile learning would decrease the achievement gap among at-risk students. These studies identify the need for Title I classrooms to improve students' academic achievements through mobile learning.

Cheok et al. (2017) asserted that teachers' perceptions of mobile learning integration are essential for enhancing secondary education. Viberg et al. (2020) and Wilkinson and Barter (2016) argued that teachers affect how students perceive learning. Educators' viewpoints also influence decision-making and policy change (Adel & Rafie Mohd Arshad, 2018; Al-Emran et al., 2016; Alrasheedi et al., 2016). Teachers' beliefs impact what learning style they deem as the

most effective for their learning environment (Lockett, 2019). Subsequently, the implementation of mobile learning depends on teachers' perceived ease of using mobiles for teaching and learning (Akour et al., 2021). Teachers' competency in instructional practices influences perceptions and learning results. Consequently, teachers' competency impacts their instructional practice (Yoo, 2016).

Skeptics contend that mobile learning poses a problem for students. The contention is that a person's previous experience with the internet could affect their behavioral intentions for using mobiles as an educational learning tool (Kaliisa, & Picard, 2017). However, Crompton and Burke (2018) argued that mobile learning is also effective because of students' perception of the innovative learning approach in comparison to traditional pedagogies where students are without flexible capabilities. The ability to virtually communicate with peers impacts secondary students' positive perception of using mobile learning (Hwang et al., 2018). Briz-Ponce et al. (2017) also asserted that students who enjoyed learning with technology saw improvements in their behavior and academic outcomes.

### **The Effects of Teacher Professional Development**

Technology integration is more effective when teachers are properly prepared to integrate technology in the classroom (Drake & Reid, 2018; Lawless, 2016; Shirley, 2018). One of the existing complexities of technology integration is that schools do not properly implement educational technologies into their classrooms with students who can benefit and adapt to the new engaging educational model (Shirley, 2018). The problem is not always with the teacher. Researchers report that some teachers admit the complexity of not receiving enough professional development for implementing technology for learning (Lawless, 2016; Shirley, 2018) and/or a

lack the knowledge and resources to effectively incorporate it into their curricula (Bano et al., 2018; Sulisworo & Toifur, 2016).

Reports show that teachers have legitimate concerns because many schools lack the professional development to adequately use and implement the mobile learning theory (Bano et al., 2018). Another complexity is that low-income students lack access to computers at home. The lack of familiarity with technology prevents students from adapting to new technologies (Drake & Reid, 2018; Lawless, 2016). As such, these complex situations create an unwelcoming environment for technology integration. Teachers and students lack the necessary training to sustain academic success with technology integration (Drake & Reid, 2018; Shirley, 2018).

Despite the complexities that exist, professional development enhances the teaching practice of using mobile learning in class (Christensen & Knezek, 2017b; Shirley, 2018). Takemae et al. (2018) argued that professional development is essential for improving the quality of education. Researchers have suggested that training equips teachers with skills that develop an instructional practice for at-risk students (Besterman et al., 2018; Riley Lloyd & Howell, 2019). Educators' effectiveness and preference are dependent on the ability to measure students' learning outcomes (Mu'alimin, 2019). Professional development can assist teachers in effectively incorporating a mobile technology-based curriculum that enhances educators' comfortability with mobile learning (Statti & Villegas, 2020).

Many teachers' perception of mobile learning improves with increased familiarity with mobile learning and its benefits for students and educators (Christensen & Knezek, 2017a). Teachers' preferred style of teaching may be impacted by the amount of professional development they receive (Shirley, 2018). Even reluctant teachers have adopted mobile learning to improve their instructional design. K-12 teachers without any proficiency in using technology

have successfully enhanced daily teaching practices by adopting the strategy enhancers for mobile learning from school leaders (Christensen & Knezek, 2017a). However, it is difficult to create a successful learning environment without adequate resources for teachers to use technology to foster students' development. Professional development is a primary resource that creates a favorable learning environment (Ramey, 2016).

### **Student Engagement Impacts Learning Outcomes**

Groccia (2018) argued that student engagement is the best predictor of learning. The challenge is to find ways of engaging students (Heflin et al., 2017). Research indicated that schools are responsible for incorporating techniques to improve student engagement (Buskist & Groccia, 2018). There are multiple factors that affect the attention span of students who attend schools in lower-income districts (Dupéré et al., 2018). Some of those factors include needing to work, being homeless, and or starting a family (Washor, 2018). Scholars have indicated that there is a need to equip these students with social, emotional, and behavioral development to impact their learning outcomes (Dupéré et al., 2018; McDermott et al., 2019; Washor, 2018).

The social, emotional, and behavioral factors that low-income students experience distracts students and lead to their disengagement with the learning process (Heflin et al., 2017). Disengagement leads to students feeling frustrated, losing interest (Chen et al., 2016), and dropping out (Dupéré et al., 2018; McDermott et al., 2019). Bouck et al. (2020) indicated that technology is learning manipulative that benefits students' academic achievements while keeping student learners' engagement. Seemiller and Grace (2017) asserted that manipulatives help teachers keep their students on task behaviorally and academically. Researchers have argued that technology acts as a behavior deterrent, which helps teacher manages classroom behavior (Clark et al., 2016; Sanchez & Mandran, 2017).

Literature shows that students benefit from well-prepared teachers who use purposeful methods which inspire students to study and subsequently learn (Groccia, 2018; Mason et al., 2017). Groccia (2018) implied that without adjusting and or changing learning procedures for underperforming students, their learning outcomes remain the same. The most effective schools use educational approaches that channel students' attention and energies toward learning activities (Mason et al., 2017). Groccia's (2018) research explained that students demonstrate a high level of academic engagement from the integration of educational technology in the classroom. However, skeptics claim that a nonconventional learning style does not improve students' engagement in class (Heflin et al., 2017). Schunk's (2016) research refuted the thinking that mobile learning does not allow academic engagement.

Heflin et al. (2017) also argued that mobile learning does not allow educators to assess student engagement. Pimmer et al. (2016) and Shirley (2018) confirmed that mobile devices allow teachers to engage their students when students have a push mechanism to interact with their learning process. Researchers asserted that low-performing high schools are using technology to close achievement gaps, differentiate learning, and introduce new learning models (Mason et al., 2017). Integrating technology is not the only factor that drives student engagement; teachers' engagement with students while using technology fosters students' best learning results. At-risk students need an achievable leaning environment (Mason et al., 2017).

For example, Lipman's model theory of community of inquiry deter students from underachieving, becoming unmotivated, cheating, and even dropping out (De Marzio, 2017). According to Lipman (1991), probing for behaviors that prevent students from learning will help educators identify the concerns that will encourage students to academically perform well. Lipman stated that the community of inquiry reinforces positive behaviors for students to

emulate. For example, in any community of inquiry, the exemplary conduct of other student will model the behavior that improves academic outcomes (De Marzio, 2017; Lipman, 1991).

Children who are silent reinforce others how to learn in silence. Students who ask questions encourage others to ask questions. More importantly, these behaviors will gradually become normal practice within a learning community (De Marzio, 2017; Lipman, 1991).

### **Developing Motivation for At-Risk Learners with Technology**

Incorporating the correct teaching strategies according to the culture of students is significant for students' success (Aparicio et al., 2016; Jarvis et al., 2016). A learning environment and educational practice that engages at-risk students helps to motivate and improve students' academic performance (Nikou & Economides, 2018) despite any academic, social, or economic factors (Baek & Touati, 2017). Pitzer and Skinner (2017) reported that intrinsic motivation for students decreases from pre-school through secondary school, thus creating a significant challenge for effective learning (Shirley, 2018). Numerous studies identify the need to increase students' motivation for critical and effective learning (Hashmi et al., 2018; Lawlor et al., 2016; Nikou & Economides, 2018).

Further, researchers have explored alternative ways of improving academic performance by motivating students from their inherent relationship with technology (Ibáñez et al., 2020; Lawlor et al., 2016; Stevens et al., 2018). Technology is an effective tool to increase student engagement (Groccia, 2018; Hashmi et al., 2018; Shirley, 2018). There is evidence that autonomous learning is critical for improving students' motivation and perception of learning (Hashmi et al., 2018; Pitzer & Skinner, 2017; Stevens et al., 2018). Researchers have precisely argued that mobile technology provides users with intrinsic motivation (Baek & Touati, 2017; Kizilcec et al., 2017). Scholars believe that properly integrating educational technology will

increase the enjoyment and intrinsic motivation of learning (Baek & Touati, 2017; Hashmi et al., 2018; Ibáñez et al., 2020) by allowing students to develop ideas and knowledge (Ibáñez et al., 2020; Lawlor et al., 2016; Shirley, 2018; Stevens et al., 2018). In addition, students with intrinsic motivation are more likely to remain motivated and persevere after perceiving the assignment as difficult or while under achieving the expectations of the assignments (Baek & Touati, 2017).

### ***An Overwhelming Support of Mobiles***

Those who oppose mobile learning may think students are less interested in using mobiles because of the rapid growth of technology (Kaliisa & Picard, 2017). However, research has indicated that an overwhelming majority of students own a cellphone (Rataj & Wojcik, 2020). Rataj and Wojcik's (2020) survey indicated that "99.7% of participants own a smartphone" (p. 319). Studies presented relevant information regarding the increased usage of mobile devices (Rataj & Wojcik, 2020; Yokubov, 2021). According to research, users spent approximately 6.5 hours a day on mobiles, and 90% of internet subscribers spent a significant amount of time accessing the Internet (Rataj & Wojcik, 2020).

The capabilities of mobile technology are one of the many reasons for the recent increase (Rataj & Wojcik, 2020; Yokubov, 2021). Research has shown that users are adopting mobile devices because of their visual capabilities (Rataj & Wojcik, 2020). In addition, a mobile device allows one to access "powerful multimedia, social networking, communication, and geo-location (GPS) capabilities" (Schuck et al., 2010, p. 69). Although mobile devices are another technological feature of the electronic inventions, mobile technology offers other facets that appeal to the user. Mobile devices have other significant distinctions that offer more convenient capabilities than previously seen (Basak et al., 2018; Sanchez-Prieto et al., 2016). The mobility that mobile devices offer gives users' access to information in various locations (Sanchez-Prieto

et al., 2016), unlike computers that are stationary and unable to interact with users (Basak et al., 2018).

The interest in mobile devices relates to the benefits that users receive from the unfixed and unlimited access to information. Users have time to process information at their convenience (Sanchez-Prieto et al., 2016). In addition to the conveniences, many of the latest services are accessible for mobile devices. The services that support mobile devices include the access to email, Bluetooth, mobile scanners, mobile printers, and mobile labelers (Basak et al., 2018). Thus, this explains why users use mobile technologies with day-to-day activities (Sanchez-Prieto et al., 2016).

### ***Mobile Learning is an Effective Educational Approach for Unmotivated Learners***

Researchers found that mobile learning is also an effective teaching strategy (Ali & Arshad, 2016; Briz-Ponce et al., 2017; Crompton & Burke, 2018). Eighty-six percent of recent studies affirm the academic benefits of using mobile learning (Crompton & Burke, 2018). Gan and Balakrishnan (2016) argued that mobile learning is an educational practice that provides educators with a viable solution to improve achievement gaps. Researchers asserted that the integration of technology transforms a learning environment for students (Ali & Arshad, 2016; El Shaban & Egbert, 2018; Kessler & Hubbard, 2017). A student-centered environment is transformative because the learning process revolves around the interest of the student without a fixed time and location (Ali & Arshad, 2016; El Shaban & Egbert, 2018). As such, mobile learning offers students learning possibilities that increase their chance to succeed (Jarvis et al., 2016; McQuiggan et al., 2015; Schuck et al., 2010). As a result, student efficiency and productivity improves (Sanakulov & Karjaluo, 2015).



However, Crompton et al. (2016) reported that some schools do not have access to adequate technology for every student. Many schools may have only one working computer lab and/or enough working mobile devices for classes or certain grade levels to share. Cho and Cho (2017) examined the difficulty that many teachers experience with integrating computer and technology use. The conflict with scheduling technology causes many teachers from using computers and or technology. Cho and Cho (2017) asserted that schools without adequate technology usage usually have more teachers that are reluctant to use technology than schools fortunate enough to have enough technology for every student. Crompton et al. (2016) stated that providing technology for every student is an impossibility for many schools. The challenges for Title I schools are due to students' economic barriers (Cardullo, 2019).

Many high schools have addressed their computer and technology concerns by employing students to bring their own mobile devices (Ali & Arshad, 2016; Crompton et al., 2016). The results of the widespread access to technology and the supplemental usage play an integral part in learning (Cardullo, 2019; Welsh et al., 2018). Mobile devices are becoming more accessible and affordable; therefore, many schools consider this learning resource as a viable option for equipping and assisting students to confront the schools' deficiency in technology equipment (Crompton et al., 2016).

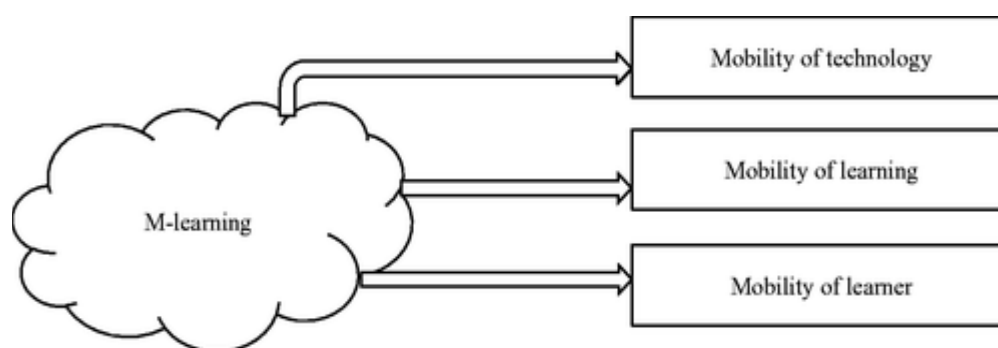
### **The Impact of a Mobile Technology- Based Instructional Design**

There is a feeling that mobile phones will distract students from learning (Heflin et al., 2017). However, the figure below indirectly is presenting refuting evidence. The mobility of technology is educationally important (El-Hussein & Cronje, 2010) because students academically benefit from bring their mobile devices to class (Welsh et al., 2018). The capabilities of a portable device are learning tools that can help students with their academic

deficiencies (Cohen & Ezra, 2018), which show the importance of the mobility of learning (El-Hussein & Cronje, 2010). The technological integration is appropriate for students who desire a learning practice that fits their learning needs (Veronica et al., 2020), expressing the need to have mobility for the learner (El-Hussein & Cronje, 2010).

**Figure 1**

*The Three Concepts of Mobile Learning*



*Note.* Source (El-Hussein & Cronje, 2010, p. 17).

There are also conveniences with having the mobility to learn (Yüksekdağ, 2016). Some of those conveniences include students gaining access to class content while participating in authentic learning activities (Ali & Arshad, 2016; Yüksekdağ, 2016). Scholars note that mobile learning has unlimited learning resources, access to rapid information, and two-way interaction (Briz-Ponce et al., 2017; Crompton & Burke, 2018; Hamidi & Chavoshi, 2018). Students can benefit from mobile learning because the information is readily available (Ali & Arshad, 2016; Yousafzai et al., 2016; Yüksekdağ, 2016).

Mobile learning helps students complete coursework (Ali & Arshad, 2016; Hamidi & Chavoshi, 2018; Yüksekdağ, 2016). Research has shown that creating a learning environment that allows students to learn at their learning pace benefits struggling students (Al-Adwan et al.,

2018). Consequently, mobile learning will motivate students to concentrate while learning (El-Sofany & El-Haggar, 2020). Heflin et al. (2017) contended that students might lack concentration within a mobile learning environment. However, Bernacki et al.'s (2020) and El-Sofany and El-Haggar's (2020) research revealed that students' concentration depends on the structure of a learning activity.

Chen et al. (2016) further explained that integrating technological learning practices and experiences will help students mimic the world beyond the class. Mobile learning contributes to students' success because it creates a learning environment that helps students learn and apply concepts to real-life scenarios (Huang et al., 2016; Nerminathan et al., 2017). The implication explains the impact of mobile learning for students in content areas and how the instructional practice is with developing for the workforce.

Experts in the field of learning also consider incorporating technology as an educational practice that advances content standards (El-Sofany & El-Haggar, 2020; Hughes & Yakubova, 2019; Yakubova et al., 2016). According to Douma and Adler (2020), English learners are a current population of students who require customized learning. The Center for Applied Special Technology (2018) indicated that technology helps English learners with their academic needs. Ali et al. (2020) asserted that integrating technology is an effective instructional design for learning languages (Alkhezzi & Al-Dousari, 2016; Chinnery, 2006; Klimova, 2018).

In addition, educational professionals consider mobile technology as a beneficial learning tool for language courses (Rataj & Wojcik, 2020) which helps guide students with their intercultural communication skills (Fox, 2019). Students have the accessibility to review concepts by reading and reviewing multiple material to gain deeper enrichment of a lesson (Amstelveen, 2019). As a result, students can acquire grammatical and lexical skills that improve

their speech and literacy competencies (Yokubov, 2021). These learning outcomes benefit students who need additional academic support with literacy (El-Sofany & El-Haggar, 2020).

Mathematics is another core subject that students experience organizational challenges because of low problem-solving skills (Justicia-Galiano et al., 2017). Research showed that low-performing students in K-12 education who underperform in English language courses are often underperforming in mathematics (Bouck et al., 2020). Technological instructions offer a viable solution to confront the current challenges that at-risk students experience in math (Yakubova et al., 2016). Teachers can provide a custom plan that reinforces concepts for students to retain knowledge from using technology tools that will help improve at-risk academic performance in mathematics (Hughes & Yakubova, 201; Satsangi et al., 2016). The insinuation is for educators to foster students learning with an intentional plan to integrate technology to provide students with provisional accommodations to support at-risk learners.

The social development that students receive from mobile learning is another notable advantage (Alrasheedi & Capretz, 2018; Chaka & Govender, 2017). Psychologists explain that collaborative learning in a self-regulated learning environment helps students create and monitor personal goals for evaluating learning achievements (Hadwin et al., 2018), which impacts students' academic performance and retention (Bernacki et al., 2020). Students can provide verbal and written responses to their classmates with a mobile device (Rataj & Wojcik, 2020). As a result, learners can receive academic support from peers within a mobile learning style (Crompton & Burke, 2018) by sharing content, beliefs, and task (Hadwin et al., 2018).

In addition, mobile learning gives students other collaborative networking opportunities (Sharples et al., 2009; Tuhkala & Kärkkäinen, 2018). Answering questions with a mobile device increases students' participation and interaction with education because passive listening creates

boredom (Baek & Touati, 2017). Previous research has shown that mobile learning provides students the opportunity to explore content as active learners rather than passive listeners (Bowen & Peterson, 2019; El Shaban & Egbert, 2018; Lockett, 2019). Interacting with others provides unmotivated students with many academic benefits (Sharples et al., 2009). Research has also revealed that students gain communication skills (Hämäläinen et al., 2018) while interacting with others (Rataj & Wojcik, 2020).

Yokubov (2021) indicated students have ample opportunities to interact with teachers within a mobile learning style. Students can develop skills and master concepts by quickly sharing information with their teachers (Rataj & Wojcik, 2020), and educators can access timely and correct information with mobile learning. The mobile learning style platform enables the student to inform educators of their learning needs because students have an opportunity to express their concerns privately and comfortably (Chen et al., 2016).

### **Mobile Gaming and Classroom Instructions**

Teachers who bridge student engagement with the technology that students prefer to use outside the classroom will help students gain academic concepts within the classroom (Seemiller & Grace, 2017). Shonola et al. (2016) reported that an overwhelming number of students support using mobile learning to enhance their learning experience. These students expressed that mobile learning has and will improve their education performance. Conversely, there is a need to explore the effects of using mobile gaming in education, which is an educational theory within mobile learning (Seow & Wong, 2016).

Although there is a vast amount of recent literature that supports the implementation of mobile learning (Ali & Arshad, 2016; Briz-Ponce et al., 2017; Crompton & Burke, 2018; Statti & Villegas, 2020), there are some skeptics that challenge the perspective of using mobile

learning to enhance academic achievements (Chen et al., 2016; Hwang & Chang, 2016; Nadolny et al., 2017). Nadolny et al. (2017) believed that using mobile games with an emphasis on winning can have an adverse effect on learning outcomes, and that students concentrate more on winning than learning (Nadolny et al., 2017). Other researchers believe that there is a theory that students are less cognitively stimulated within a mobile gaming-based learning style (Hwang & Chang, 2016). Similarly, there is a concept that students are less likely to memorize information that is quickly accessible (Sharples et al., 2009). An improper design of mobile activities can cause students confusion if the learning design does not fit the age level of the students participating (Chen et al., 2016).

However, there are new technological developments and an emerging interest in using mobile games for learning. Mobile gaming provides students with an enjoyable learning experience (Baek, & Touati, 2017; Chen et al., 2016; Gangaiamaran & Pasupathi, 2017). Students enjoy using educational games with mobile technology to stimulate their academic interest in place of reading articles and listening to recorded lectures (Baek & Touati, 2017; Rataj & Wojcik, 2020).

There is a wide range of mobile applications that educators can use for mobile gaming in all academic subjects (Rataj & Wojcik, 2020). According to research, Kahoot! (a game-based learning platform), Quizlet (a learning platform with learning tools games) and Peak (a learning platform for brain training) are among the many mobile applications that deliver a diverse learning opportunity for students (Rataj & Wojcik, 2020). Enjoyable mobile learning games can improve learners' academic achievements because gaming helps students incorporate knowledge (Chen et al., 2016).

Moreover, Rataj and Wojcik (2020) shared that students can assess mobile applications with virtual forums and video classes by using Photomath (an app that displays a camera calculator to show step-by-step instruction for solving math equations), Duolingo (an app for learning languages), Google Classroom (a blended learning app that allows students to share content), Class Dojo (a classroom communication app for reporting information), Google Arts & Culture (a learning app for discovering artists, techniques, and trends in art), and Canvas Student (a mobile app for submitting assignments). However, Bouck et al. (2020) and Heflin et al. (2017) claimed that educators should use learning apps within a socially viable learning environment; otherwise, mobile learning can become a distraction. Subsequently, educators who consider the appropriateness of how to integrate technology will allow a student to experience success (Drake & Reid, 2018; Lawless, 2016; Shirley, 2018).

### **Collecting Data from Mobile Learning**

Akour et al. (2021) argued that most studies express the technological elements in teaching and learning with technology without paying attention to the psychological factors; the misinformation is often the reason that some educational professionals are reluctant to use technology in education to its full potential. However, innovative approaches have advanced the mobile learning theory by providing key concepts about collecting data from internet usage (Iten & Petko, 2016; Lee et al., 2019). Mobile technology provides unique opportunities to explore the psychological processes of students' results (Crompton et al., 2016). Lee et al. (2019) emphasized using mobile devices in education for collecting retraceable data. Research indicated that students produce data whenever a mobile device is in use. Mobile devices can record information both in public and private domains, inside and outside the classroom (Bernacki et al., 2020).

Research presented different ways of assessing a user's cognitive skills when learning with mobile devices (Harley et al., 2019). Students' cognitive, emotional, and motivational challenges can emerge from scientific data (Näykki et al., 2017). For example, a wearable recording device can record students' cognitive behavior in the process of learning (Lee et al., 2019). Learners' electrodermal activity during learning activities provides essential data. Moreover, educators can measure cognitive engagement from video data that captures students' interactions, peer engagements, and class observations (Lee et al., 2019). The contentions express concerns with the perceived risk of privacy issues (Kaliisa, & Picard, 2017). Mutimukwe et al. (2021) addressed the privacy concerns of collecting and analyzing data for improving teaching and learning. Their research showed that it is highly probable that students are willing to disclose personal information when using technology if their identity remains private (Mutimukwe et al., 2021).

Epp and Phirangee (2019) expands the findings of Lee et al. (2019) regarding collecting scientific data that measures students' cognitive activity while learning. Epp and Phirangee (2019) identified the potential success of *microlearning*, which is using mobile devices to measure a user's cognitive learning process in small activities. Epp and Phirangee's (2019) research presented the potential of using microlearning to benefit assessment data and academic achievements. Research showed that any subject that teaches language is appropriate for microlearning. Students benefit from vocabulary rehearsal and acquisition (Epp & Phirangee, 2019). The inferences drawn can help increase users' cognitive and behavioral engagement (Bernacki et al., 2020; Bevan, 2017).

The benefit of data provides teachers with an ongoing formative assessment of themselves and students' productivity to help educators adjust their lessons according to their



student's learning styles (Holstein et al., 2017; Reeves et al., 2017). However, information from mobile learning devices must be appropriately collected, understood, analyzed, and theorized to generate valid results and inferences (Bernacki et al., 2020). These conclusions are a summative expression of current research.

However, there is a gap in literature regarding the effects that mobile learning has on LIPHS students. Recent studies do not present the lived experiences of LIPHS students and the perceived impact of technology on their educational success. This gap in literature is a cause for concern. Many high school students from low-income families in Title I schools are at risk of dropping out of secondary education. Many of these students lack academic motivation, a basic skill set to succeed (Anderson, 2018). Since high school students from low-income families are understudied, more data will develop the mobile learning theory. Discovering specific insights about LIPHS students will aid in exploring the impact of mobile learning among at-risk classroom learners.

The interest in exploring the effectiveness of mobile learning (Kearney et al., 2012; Nikou & Economides, 2017) is valuable and warrants current and future educators' attention. Exploring mobile learning among high school students in Title I school from low-income families can explain the effects of mobile learning among LIPHS students. Researchers focus on early childhood (Anderson, 2018) or higher education (Cilesiz & Drotos, 2016), who are more resistant to adopting new technology (Celik, 2016). Despite the perception of students over the age of 25, research has shown that younger students are more content with using mobile devices than students in higher education and are willing to use mobile tools instead of notebooks (Rataj & Wojcik, 2020).

There is a need for additional research of students in Title I secondary education that consider the standard form of education boring. More research on teaching styles that are less motivating for students will help researchers understand other educational variants that contribute to students' disincentives to learn. Previous and recent scholars have expressed the impact of the mobile learning theoretical framework (Moore, 1925; Rataj & Wojcik, 2020; Sharples et al., 2009) without providing specific research from actual LIPHS students. Learning the perspectives of LIPHS students will provide essential data for future research.

Research that details the academic progression of LIPHS students is another understudied area of concern. This information can explain if LIPHS students academically progress better in an autonomous or conventional learning environment. The study also can drastically impact the perception of autonomous learning. A study comparing private to public high school students from low, middle, or upper-income families will benefit future research. These data can assist with comparing the effectiveness of utilizing the mobile learning theory with different student groups throughout academic disciplines. Explaining the critical dynamics of learning may additionally help identify the most effective educational practices for mobile learning.

### **Summary**

The literature review presented the mobile learning theory (Chaka & Govender, 2017; Dashti & Aldashti, 2015) among at-risk students (Anderson, 2018; Cilesiz & Drotos, 2016). Research included the advantages of educators using technology to facilitate at-risk learners (Alrasheedi & Capretz, 2018; Baek & Touati, 2017; Bano et al., 2018). Additionally, studies showed students' academic performance increases with mobile learning (Crompton & Burke, 2018; Sung et al., 2016).

Scholars argued that mobile learning impacts at-risk students' desire to learn (Nikou & Economides, 2018). Aparicio et al. (2016) and Gan and Balakrishnan (2016) maintained that a technological device is a learning tool that helps stimulate students' attention. A learning environment with mobile capabilities is motivating for students (Baek, & Touati, 2017; Kizilcec et al., 2017). Students consider learning enjoyable (Baek & Touati, 2017; Chen et al., 2016; Gangaiamaran & Pasupathi, 2017) when they can learn while participating and interacting with teachers and peers (Rataj & Wojcik, 2020). Researchers promoted motivating students through active engagement to prevent students from becoming or remaining uninterested (Baek & Touati, 2017; Nikou & Economides, 2018).

The non-academic advantages of a technology-based educational approach curriculum are also significant for at-risk students (Klimova, 2018; Lin & Lin, 2016; Nerminathan et al., 2017). According to Gan and Balakrishnan (2016), students' time management, metacognition, personal regulation strategies, and self-confidence are among the other advantages. Mobile learning also contributes to developing students' students' social skills (Adel & Rafie Mohd Arshad, 2018; Al-Emran et al., 2016; Alrasheedi et al., 2016).

## **CHAPTER THREE: METHODS**

### **Overview**

The purpose of this transcendental phenomenological study was to determine the perceived impact that mobile learning has on low-income, private high school (LIPHS) students at a regionally accredited high school located in the Midwestern part of the United States in the hopes of preventing students from leaving school early. This chapter presents the study's design, research questions, setting, participants, and procedures. In addition, the chapter explores the responsibility of collecting and analyzing data in ways that exemplified the study's trustworthiness and ethical considerations. Finally, the comprehensive summary provides an overview of the transcendental phenomenological research design.

### **Research Design**

In qualitative research, a researcher identifies the problem that needs to be explored and answered. The researcher must explain the problem and the gaps in research using a theoretical framework. Recent literature helps to produce categories and themes (Creswell, 2018). The phenomenological research design helps to explore a single concept for educational growth. The direct sampling research method provides specific data from lived experiences (Devers & Frankel, 2000). I gathered data from the participants' lived experiences to pursue the answers to my research questions.

The purpose of the interpretive framework was to analyze data that answer the study's research questions (Creswell, 2018; Henriques, 2014). Conducting interviews was one of the essential data-collecting methods of phenomenological research (Creswell & Poth, 2016). The qualitative research design allowed the participants to explain the research problem from their perspective. Understanding the perspectives of the participants were essential for confronting the

educational gap among LIPHS students. The phenomenological research design was appropriate for this study because the research design helps explore the impact of how modern mobile technology provided students an educational tool to learn from students' lived experiences.

Husserl established the transcendental phenomenological philosophy (Gill, 2014; Henriques, 2014; Polkinghorne, 1989) that expressed the importance of a structured experience (Polkinghorne, 1989) and consciousness as a phenomenon (Silverman, 1980). The researcher observed a perceived phenomenon in a controlled experiment (Polkinghorne, 1989; Silverman, 1980) to examine the phenomenon through a lived experience (Moustakas, 1994). For example, the transcendental phenomenological research design's unique collection method includes interviews, observations, and collecting documents (Creswell, 2018; Moustakas, 1994).

Researchers who serve as human instruments cannot include their biases when conducting a lived experience study. There is a need to be "completely open" and "receptive" when observing the fieldwork with the study's participants (Moustakas, 1994) to help grasp the lived experience (Creswell, 2018). The transcendental phenomenology research design was vital to understand and explain the overall essence of the experiences in terms of the participants' conditions, situation, and or context. The research design structured the lived experiences that allowed researchers to reduce the data into quotes to create themes (Creswell & Poth, 2016).

### **Research Questions**

**Central Research Question:** What is the lived experience of low-income, private high school students using mobile technology in class?

**Subquestion One:** What is the academic impact of using mobile technology in the classroom among low-income, private high school students who accept technology as a benefit for learning?

**Subquestion Two:** What personal or social benefits will low-income, private high school students who accept technology as a benefit for learning receive from using mobile technology in the classroom?

### **Setting**

Stark High School (pseudonym) is a mid-sized high school located in the midwestern United States with 86 faculty members. The percentage of teachers of color is 18%. Of the educators, 55% have a master's degree and 30% are an alumnus. The student graduation rate in 2020 was 96%. There are a total of 68 core classes, 22 advanced placement and or honor classes, and 77 electives courses. Students have the option to enroll in dual credit courses, giving students the ability to receive high school and college credits. The school's centralized mission is to prepare students for academic and spiritual success.

The total student enrollment population is between 850 and 875, and 88% of the student population classifies as a minority ethnic group. The majority of the minority student body population is African American. This Title I private Lutheran high school serves a large population of students from low-income families, which is a significant research variable for this research study. The majority of the students fit the economic requirements for the parental choice program in the state where the school resides. The income limits reflect the economic class status of over 80% of the study population as low-income students living in poverty. The parental choice program explains the federal family size maximum yearly income poverty level for 2021-2022 as \$28,072 for a family of one, \$37,928 for a family of two, \$47,784 for a family of three, \$57,640 for a family of four, \$67,496 for a family of five, and \$77,352 for a family of six (Private School Choice Programs: Student Applications, n.d.).

The school has approximately 600 mobile Chromebook laptops that students access during the school day. The school's mobile technology is for in-school use only. The school has recently received Chromebooks from the state's public school system since many students are learning virtually. There are also four computer labs with approximately 200 computers total.

Stark High School is a partnered organization with other Lutheran elementary and high schools. The upper-level administration at Stark High School consists of the CEO, head of schools, principal, and vice-principal. In addition, there are lower-level administrators within the school structure, which include the dean of academics, dean of culture, and dean of students. Stark High is accredited by the North Central Association of Secondary Schools. This site is in complete compliance with the research design and topic. Stark High School administration supported the research process to further support its students' academic success.

### **Participants**

There were four criteria that participants met to participate in the study: age, enrollment, lunch, and academic motivation. First, each participant was 18 years of age or older. Second, the prospective participant was a current student of a private Title I high school. Third, the study's participants received free or reduced lunch. Fourth, the participants were self-identified as being academically unmotivated to learn. I ensured that the four conditions were met as each prospective participant were emailed an electronic screening survey through SurveyMonkey. The survey included their email address, school affiliation (i.e., public or private), academic motivation, grade level, grade point average, lunch status (i.e., free or reduced lunch), gender, ethnicity, nationality, and age.

I employed purposeful sampling to purposeful sampling process to capture a specific population from various individuals (Patton et al., 2008) to determine essential factors (Patton,

2002). The aim was to select students from different social classes, academic placements, genders, ages, races, and nationalities. The objective was to provide a diverse, balanced sample pool of students at Stark High School where 12 to 15 students were selected based on the purposeful and maximum variation sampling method.

### **Procedures**

The procedures ensured the study's trustworthiness and ethical consideration when collecting data. For example, I requested written permission from the administrator at Stark High School by email and letter for approval, which the school administrator granted. Next, I defended my proposal and received permission from Liberty University's Institution Review Board (IRB) to conduct my research study. The process started with completing and submitting the IRB application to Cayuse. I notified the chair of my committee after receiving the IRB's approval letter. I then forwarded the letter to SOEDoc-ReviewLiberty.edu with the chair's approval to gain permission to collect data.

Once I gained permission from the school's principal, I emailed the academic dean at Stark High and provided her with the principal's permission letter and the study's requirements, purpose, and procedure document. I then asked Stark High's academic dean permission to speak to the students during the school's lunch period. Students received the study's requirements, purpose, and procedure document and the general consent letter at the information meeting. I collected the names and email addresses from all potential candidates.

The students who elected to participate in the research study were given the option to complete and submit the general consent form and the screening survey at the information meeting. I sent an email to those who did not submit their general consent letter and screening survey at the information meeting. The email informed the students that if they wish to



participate, they will need to submit their general consent letter and screening survey within one-week. I sent a follow-up email four days later to reiterate the one-week deadline for students who do not respond.

The survey screening questions helped me choose the participants based on the recruiting criteria. Students had a one-week deadline to complete their survey to complete the maximum variation sampling process. The participants were notified they have been chosen to participate in the study. I then performed a pilot test with four unselected students, the purpose of which was to examine the questions' clarity and validity. I edited the interview questions as needed.

I then contacted some of the students at school and others by email to schedule a Zoom interview. Each interview for the first data collecting method lasted 30 minutes to an hour. There were a set of 15 open-ended questions. The semistructured interview allowed additional questions based on the students' responses (Creswell & Poth, 2016), which enabled the participants to express their opinions and feelings naturally. Each of the participants received two emails before their scheduled interview. I sent the first email one week before the scheduled interview and the same email one day before the scheduled interview, which informed the participants to bring a chosen photograph one week before their interview that explained the academic benefits of incorporating their artifact in one of their academic classes. Both emails encouraged the participants to choose a comfortable location to meet and to contact me with any questions.

Then, I retrieved the participants' photograph before each interview by email for students to use as they answered questions regarding the photo. I saved the photographs that students emailed me on a password-protected computer, using the students' pseudonyms as the filenames. I saved the photographs that students personally gave me within a protected three-ring binder in

a locked desk drawer at home. Photovoice was a viable method of collecting data for a transcendental phenomenology research study because of the participant's ability to provide a verbal account of their photographs (Latz & Mulvihill, 2017). I audio recorded the interviews on Zoom and then used Grain.com, an online transcription service, to transcribe the data. I created field notes to aid in the transcription process.

To aid in the data collection process, two focus groups met with four participants within each group after the virtual interviews. Participants were placed within two groups based on their availability, which was received after their Zoom interview. The focus group consisted of the study's participants on Zoom. I recorded the focus groups' responses. The participants answered five questions (which appear in the Data Collection section), and each session lasted 45-60 minutes.

The interviews, photovoice, and focus groups captured the central themes across significant variations (Creswell, 2018; Patton, 2002). I used several data collecting methods for thematic saturation and triangulation. Bracketing occurred before every data-collecting method (Moustakas, 1994). Bracketing ensured that the human instruments set aside experiences to present accurate perspectives of the research's phenomenon (Creswell, 2018; Moustakas, 1994). Moustakas' (1994) data-collecting method structured the study's findings. The data-collecting practices recorded the students' experiences and any recurring viewpoints to help identify the study's results. The textual and structural descriptions examined the phenomenon of the lived experiences. The material from saturation created themes of common shared experiences (Creswell & Poth, 2016).

### **The Researcher's Role**

My primary role as a human instrument of a qualitative research study was to gather data (Lincoln & Guba, 1985; Merriam, 2002). I did not have any personal or academic authority over the participants, and I understood my biases and preconceptions (Merriam, 2002). I believed technology was a viable educational resource for teaching students, and low-income students can learn with the correct educational practices and resources. However, I controlled my biases by bracketing my experiences to ensure that my preferences did not hinder the accuracy of my data (Sutton & Austin, 2015). The data-method procedures ensured that my biases did not affect me collecting and interpreting data (Merriam, 2002; Moustakas, 1994; Sutton & Austin, 2015).

I ensured accuracy by using a viable transcription service, which was Gain.co. I guaranteed integrity by keeping the identity of the participants and location confidential, despite my dual role of working at the research site and the similarities that I shared with the students (Sutton & Austin, 2015). We shared commonalities, including certain geographical and demographical cultural specifics. The participants were not informed of my teaching philosophy because my purpose as a qualitative, transcendental phenomenological researcher was to retrieve an organic response (Lincoln & Guba, 1985; Merriam, 2002; Moustakas, 1994).

### **Data Collection**

Interviews, photovoice, and focus groups were the three methods of collecting data. The detailed procedures ensured accuracy and integrity. The intent was to secure information from participants. Computer files and a three-ring binder organized each of the three data-collecting methods.

## **Interviews**

The 15 semistructured interview questions allowed students to feel welcome to express their opinions (Hewitt, 2007; Myers & Newman, 2007). The audio-recorded interviews occurred virtually via Zoom. In addition, the Zoom file showed the alias and time of each interview. The opened-ended interview questions and recorded answers helped provide transparency and integrity (Lincoln & Guba, 1985). All digital files were password-protected.

### **Open-Ended Interview Questions**

1. How would you describe yourself as a student?
2. How would you describe your attitude towards school?
3. Tell me about your learning experience in high school.
4. Tell me about your favorite class.
5. What makes your favorite class enjoyable?
6. Explain your experience in your least favorite class.
7. What do you dislike the most about your least favorite class?
8. How would you improve your least favorite class?
9. Describe a classroom experience when students were motivated to learn.
10. What do you know about mobile learning?
11. How do you feel about learning with mobile technology in the classroom?
12. Explain how mobile technology can be effective for motivating you to complete assignments in class.
13. How can learning with mobile devices in class improve your learning experience?
14. How can using mobile learning in class improve your academic performance?
15. Explain the challenges of using mobile tools in class.

All 15 interview questions were straightforward (Myers & Newman, 2007) and answered the central research question: What is the lived experience of low-income, private high school students using mobile technology in class? Questions One through Three “invited the interviewees to feel comfortable to open up and talk” (Creswell, 2018, p. 164) about a knowledge-based perspective (Patton, 2002). The questions considered the participants’ conceptual biases (Hewitt, 2007).

Questions Four through Nine invited students to talk about an academic environment they preferred. This information helped gather valuable data (Myers & Newman, 2007) addressing why participants lack the effort to achieve academically (Hidi & Harackiewicz, 2000). The participants’ information helped identify LIPHS students’ intrinsic (i.e., personal enjoyment) and extrinsic motivation (i.e., external influence) for learning (Ryan & Deci, 2000). These questions addressed Subquestion Two of the research: What personal or social benefits will low-income, private high school students who accept technology as a benefit for learning receive from using mobile technology in the classroom?

Questions 10 through 14 inquired about the academic challenges that low-income students experience, which was inspired by three well-researched assertions: high school students who lack the desire to learn academically are more likely to drop out of school (Jia et al., 2016; Nowicki et al., 2004); there is a need to improve student's academic motivation (Jia et al., 2016); and students' socioeconomic status affects their intrinsic and extrinsic motivation (Nowicki et al., 2004). These questions addressed Subquestion One of the research study: What is the academic impact of using mobile technology in the classroom among low-income, private high school students who accept technology as a benefit for learning?

### Photovoice

Photovoice was the second method of data collection that followed each interview. I combined photovoice with the first data collection method (i.e., interview) to help students conceptualize their viewpoints about using mobile technology in the classroom. Photovoice is a form of a transcendental phenomenology research methodology that allowed research participants to provide a verbal explanation of their photographs (Latz & Mulvihill, 2017). Participants collected a photograph from the internet that best reflected the advantage(s) of using mobile learning in the classroom and brought the photograph to the Zoom interview. Participants received instructions to answer three questions. Next, the ideation occurred, which consisted of establishing thematic strands to convey findings within the qualitative research literature. The presentation steps included, exhibiting the content collected, explaining their perspective from written questions that helped students provoke thought, and confirming their viewpoint. This process consisted of how current researchers perceived students' responses (Latz & Mulvihill, 2017).

Students answered the following questions about their picture:

1. How will your photograph, if implemented, affect students learning?
2. How would you like to see the photograph used in a mobile learning class setting?
3. What are the other benefits (socially and or personally) of using your suggestion in high school?

The first prompt addressed Subquestion Two: What personal or social benefits will low-income, private high school students who accept technology as a benefit for learning receive from using mobile technology in the classroom? The content to the first question of this research method helped articulate their point of view while using a visual. Latz and Mulvihill (2017)

explained that personalized visuals would help with data collection. The information was also a direct response to the participants' beliefs, which allowed participants to provide additional information that was not recorded from the other data collection methods. Davis and Venkatesh's (1996) study explained the need to understand the potential effects of technology from the users' perceptions.

The second prompt directly answered Subquestion One. What is the academic impact of using mobile technology in the classroom among low-income, private high school students who accept technology as a benefit for learning? The answers validated the interview and or focus group responses. TAM's variants, perceived ease, and perceived usefulness (Davis & Venkatesh, 1996) allowed students to provide an in-depth response to using mobile learning in the classroom. Students were permitted to reveal personal information about their perception of mobile learning because students were given the ability to choose and explain the photograph that represented their beliefs (Latz & Mulvihill, 2017).

### **Focus Groups**

The focus group consisted of the study's participants that occurred virtually using Zoom. I created two focus groups with eight participants who met after the virtual interviews, and students were placed into focus groups based on their availability. The time and the date were scheduled next. The participants answered five questions, and each session lasted 45-60 minutes. I saved a digital copy of the focus-group transcripts on the same computer used for the study. The files have identifiable names. The students' verbal answers to the six focus group questions were transcribed by using an online transcription service, Grain.co. The transcriptions were saved to a password-protected computer.

### Focus Group Questions

These scripted questions encouraged dialog (Myers & Newman, 2007). The focus groups' centralized focus was to address the uncommon and common themes from the interviews (Moustakas, 1994). The questions helped explain the impact that an academic setting can have on a student's academic achievement (Phillippi & Lauderdale, 2018).

1. Can you introduce yourself for the record?
2. What type of learning environment do you prefer? Be as descriptive as possible.
3. What can high school teachers do to make learning more enjoyable?
4. How can using mobile technology in high school prepare you for social and academic success?
5. What type of mobile technology benefits your learning?
6. What are the challenging aspects for teachers of using technology in class?

The aim of the focus groups questions was to understand the study's central research question: What is the lived experience of low-income, private high school students using mobile technology in class?

Questions One and Two invited the participants to explain a perceived enjoyable class setting. Understanding the impact of the class setting was vital to the research question because a learning environment can affect a person's perception of education (DiLalla & Mullineaux, 2008). TAM indicated the impact that students' perception can have on their wiliness to participate within a learning style (Davis, 1989; Davis & Venkatesh, 1996). Question Three allowed the participants to explain their perceived social and academic impact of using mobile technology. The participants' responses answered Subquestion Two: What personal or social



benefits will low-income, private high school students who accept technology as a benefit for learning receive from using mobile technology in the classroom?

Questions Four and Five explored the participants' perception of mobile technology in an educational environment (DiLalla & Mullineaux, 2008; Sharples et al., 2009). According to TAM, the responses to Questions Four and Five showed the impact of using mobile technology (Davis, 1989; Davis & Venkatesh, 1996) and help answer Subquestion One: What is the academic impact of using mobile technology in the classroom among, low-income, private high school students who accept technology as a benefit for learning?

### **Data Analysis**

A phenomenological research design (Polkinghorne, 1989), based on Husserl's (1931) methods of research was used. Transcendental phenomenology has specific phenomenological methods which include *epoché*, horizontalization, textual and structural descriptions, and the openness to understand how the information gained will apply to a study (Husserl, 1931). Moustakas' (1994) prescribed phenomenological system helped obtain the data collected. The data analysis process started when I collected the data of students' lived experiences (Qutoshi, 2018). I created a complete description of the lived experiences by recording all three data collecting methods (i.e., interviews, focus groups, photovoice).

Zoom recorded the verbal transcriptions from the virtual interviews, photovoice, and focus groups. The transcriptions included the participants' questions and responses from each data collecting method. I transcribed the participants' responses into a written format by using Grain.co, and then I reread the transcripts to check for accuracy without applying biases (Moerer-Urdahl et al., 2004). Participants received a copy of the transcriptions by email to verify that the transcriptions were accurate and then confirmed the transcriptions in an email reply.

The open coding process helped me develop relative categories around the core phenomenon (Creswell & Poth, 2016). I then used the descriptive process of coding to look for codes and themes. I also identified and recorded the range of perspectives of the shared experiences (Moerer-Urdahl et al., 2004; Moustakas, 1994) because including various perspectives revealed the entire experience (Polkinghorne, 1989). I used the process of horizontalization to highlight significant statements, which addressed the research questions (Creswell & Poth, 2016). I developed textual and structural descriptions by recording significant statements, sentences, and quotes from the transcriptions. The data explained the essence of the participants' lived experiences of the phenomenon (Creswell & Poth, 2016).

I used NVivo, a computer software, to help me organize my data. NVivo was appropriate because it helped me identify a list of reoccurring themes (Saldaña, 2016) for thematic saturation and triangulation (Moustakas, 1994). The software also helped record the codes that I created from the multiple sources of data (Saldaña, 2016). Additionally, NVivo allowed me to quickly assess the data.

### **Trustworthiness**

Integrity was critical in this research study. The process of conducting the research was just as significant as the study's data. The trustworthiness of a qualitative study was directly dependent on the trustworthiness of the person collecting and analyzing data. I exhibited the capability of using the verification and validation procedures to establish the quality of analysis. The findings were accurate, and the outlined procedures ensured that the research followed ethical standards. For example, the study's credibility reflected the research's trustworthiness (Lincoln & Guba, 1985; Patton, 2002; Shenton, 2004). The study methods of credibility, dependability, confirmability, and transferability ensured the study's trustworthiness.

## **Credibility**

The research study addressed credibility as it pertains to finding reality through multiple methods of lived experiences (Cutcliffe & McKenna, 1999; Patton, 2002). The three data-collection methods (i.e., interviews, focus groups, photovoice) provided triangulation and reinforced the study's findings. The process of triangulation occurred from purposely conducting high-quality research (Patton, 2002). I provided triangulation for the data reported (Cutcliffe & McKenna, 1999). I guaranteed member checking by allowing the participants to verify transcriptions for accuracy (Anney, 2014; Lincoln & Guba, 1985). The intent of adequately recording and analyzing the data was to ensure validity and reliability (Patton, 2002). Expert and peer review contributed to the credibility of the study by addressing the prospective participants' viewpoints. The research chair functioned as the expert reviewer. The peer reviewer did not have any connection to the research site or the study's participants. I did not alter the study for any reason to ensure credibility (Cutcliffe & McKenna, 1999).

## **Dependability and Confirmability**

The participants evaluated the study's findings to confirm the study's dependability and confirmability (Anney, 2014; Korstjens & Moser, 2018). Participants reviewed the data that pertains to their responses. An audit trail (i.e., transparent descriptions) verified the study's findings. The descriptions of the study started at the beginning of the research and concluded with the reported data. Using the recommendations of Cohen and Crabtree (2006), the external auditor had experience conducting audits to ensure dependability (i.e., consistency and reliability) and confirmability (i.e., the minimization of researcher's biases).

## **Transferability**

The research study addressed the study's transferability. The way I presented the data made transferability possible (Anney, 2014; Lincoln & Guba, 1982). Lincoln and Guba (1982) explained that descriptive information allowed transferability of the study's external validity. Transferability enabled others to judge the overall findings and compare the results with relevant data (Anney, 2014; Lincoln & Guba, 1982). The study's content was easily accessible because of the detailed descriptions (Anney, 2014; Lincoln & Guba, 1982). Transferability was also possible because the study selected participants through a theoretical sampling method of maximum variation. The process increased participants' perspectives (Anney, 2014; Creswell, 2018), which helped with transferability (Lincoln & Guba, 1982). The results of the study also provided a valuable and applicable experience that helped stakeholders transfer the study's results into educational practices.

## **Ethical Considerations**

The ethical standards from Liberty University's Institutional Review Board (IRB) occurred before, during (the process of collecting, analyzing, reporting, and publishing data), and after the study. The IRB at Liberty University ensured the study met the ethical considerations. The school's principal granted permission to conduct research on the school's premises. Ethical considerations involving human participants in research were a primary consideration. The students, who were 18 years of age or older, received a consent form, purpose, and time frame of the study. They knew they were volunteer participants and had the right to leave at any time. I did not have influence or authority over any of the potential student participants. I protected the identities and confidentiality of the participants and the research site by assigning and referring to the student participants and the high school by their pseudonyms. Data remained on a

password-protected computer and a three-ring binder locked in a desk drawer at home. Any documentation of the study remained inside a locked desk. The IRB at Liberty University has consent after publication (at least three years) to retrieve any data source. Thus, the research data was secure and confidential.

### **Summary**

This chapter outlined the qualitative transcendental phenomenological research method. Moustakas' (1994) data-collecting method was used to assess the lived experience of LIPHS students. The method of research comprised data from interviews, focus groups, and photovoice. Analyzing the study's data created triangulation and thematic saturation (Creswell, 2018; Patton, 2002). The data analysis strategy helped articulate the study's findings and ethical considerations to ensure credibility.

## CHAPTER FOUR: FINDINGS

### Overview

The purpose of this transcendental phenomenological study was to determine the perceived impact that mobile learning has on low-income private high school (LIPHS) students at regionally accredited high school located in the Midwestern part of the United States in the hopes of preventing students from leaving school early. The purpose of Chapter Four is to present the study's findings. The research questions that guided this study were:

- Central Research Question (CRQ<sub>1</sub>): What is the lived experience of low-income private high school students using mobile technology in class?
  - Subquestion One (SQ<sub>1</sub>): What is the academic impact of using mobile technology in the classroom among low-income private high school students who accept technology as a benefit for learning?
  - Subquestion Two (SQ<sub>2</sub>): What personal or social benefits will low-income private high school students who accept technology as a benefit for learning receive from using mobile technology in the classroom?

The chapter begins with an individual description of 13 self-described unmotivated Title I private high school seniors between the ages of 18 to 20 who qualified for free or reduced lunch. It breaks the data from individual interviews, photovoice, and focus group meetings into themes in the forms of narratives, tables, and figures that were generated using the transcendental phenomenological reduction process. The chapter concludes with data that answer the research questions.

## Participants

Thirteen self-described unmotivated Title I private high school seniors during the 2021-2022 school year between the ages of 18 to 20 participated in this study. Purposeful criterion sampling was used to select participants to ensure that they met the study's criteria. Forty-one students received a recruitment letter during a recruitment visit. Six students received a follow-up email, but none replied. Of the 29 students who received a screening survey, 23 students responded. Three students did not qualify as a result of not failing a high school course due to a lack of motivation. Twenty students met the criteria for the study. The 20 students who volunteered to participate in the study all completed the consent form, but only 13 students responded for an interview. Eleven participants in the study were African-American, one was European-American, and one was Asian-American. Six participants were male and seven were female. Two commonalities among the 13 participants were (a) they all used mobile devices in an academic setting, and (b) they attended the same Title I high school.

**Table 1***Self-Described Unmotivated Title I Private High School Seniors*

Student Participant Name	Age	Gender	Race
Marcus	20	Male	African-American
Jay	18	Male	African-American
Angel	18	Female	African-American
Chanel	18	Female	African-American
Daniel	18	Male	Asian-American
Sasha	18	Female	African-American
Ray	18	Male	African-American
April	18	Female	African-American
Curry	18	Male	African-American
Chaniya	18	Female	African-American
Elizabeth	18	Female	European-American
Mike	18	Male	African-American
Dane	18	Female	African-American

**Marcus**

Marcus is an African-American 19-year-old male senior who attends a private Title I high school and described himself as an unmotivated student. He is a devoted Christian who enjoys attending church and desires to major in theology in college. His future aspiration is to become a pastor. He is responsible for leading devotion in his choir class. He described himself as a school leader who connected well with students. Marcus also works at a part-time job as a nursing assistant.

**Jay**

Jay is an African-American 18-year-old male senior who attends a private Title I high school and described himself as an unmotivated student. He was pleased to participate in the study and confidently addressed his educational experience. He described himself as a motivated



leader. He indicated his attitude towards school to be dependent on the learning environment. Jay explained that even though his high school teachers “cared about students,” he felt that he had not learned the correct material as a freshman that would have prepared him for senior year.

### **Angel**

Angel is an African-American 18-year-old female senior who attends a private Title I high school and described herself as an unmotivated student. Angel was excited to help with the research study. She described herself as a productive, serious, laid-back student who can become lazy. Angel felt that she had learned more life lessons than academic content in high school, and that those emotional lessons made her a better student.

### **Chanel**

Chanel is an African-American 18-year-old female senior, who attends a private Title I high school and described herself as an unmotivated student. Chanel described herself as an independent student who liked “to do things on [her] own.” Her poor attitude towards school was caused by the COVID-19 pandemic. However, Chanel described her experience in high school as “pretty good” because of her teachers. As a result, Chanel learned a lot and her learning skills improved throughout high school.

### **Daniel**

Daniel is an Asian-American 18-year-old male senior who attends a private Title I high school and described himself as an unmotivated student. Daniel is the only Asian American student in the study. He described himself as a hard-working student who tended to procrastinate. He attributed his procrastination to COVID-19 virtual learning. He stated, “Virtual learning was hard.” However, Daniel considered his physical education class enjoyable because he was active. He also noted that learning is enjoyable when he had friends in his class.

**Sasha**

Sasha is an African-American 18-year-old female senior who attends a private Title I high school and described herself as an unmotivated student who “did bare minimum to get credits.” She admitted to having a negative attitude towards school because she did not like completing homework, especially on worksheets. Sasha explained her high school learning experience was different than her Montessori K-8 experience. She felt her high school work was difficult because her Montessori middle school teachers did not prepare her for the way high school teachers taught in a non-Montessori setting.

**Ray**

Ray is an African-American 18-year-old male senior who attends a private Title I high school and described himself as an unmotivated student. Ray described himself as an above-average student who did not get As in school and only put in the effort to learn because he had to attend school. He explained that high school was the same as middle school except for the amount of homework he received. Ray enjoys high school subjects that he perceived as easy. In return, he dislikes any high school course that he perceived as difficult. However, Ray’s desired classroom is a learning environment with mobile technology.

**April**

April is an African-American 18-year-old female senior who attends a private Title I high school and described herself as an unmotivated student. She had a shy and positive attitude and appeared to enjoy participating in the study. She stated, “My attitude towards school is always positive. I try to keep it positive all the time. Um, I also pushed myself in school and I strive to do better every day.” April also indicated that she “had difficulties during school.”

**Curry**

Curry is an African-American 18-year-old male senior who attends a private Title I high school and described himself as, “a hard-working student athlete who is distracted easily.” He continued, “I didn't have a lot of motivation these last two years.” He explained his learning experience was affected by virtual learning during the COVID-19 pandemic and that his school did not prepare him for virtual learning. He stated teachers’ instructions during virtual learning were unclear and assignments were not consistently available for students to complete.

**Chaniya**

Chaniya is an African-American 18-year-old female senior who attends a private Title I high school and described herself as an unmotivated student. Chaniya described herself as a driven student who was willing to try and would ask for help if needed. Math was Chaniya’s least favorite subject because the subject was challenging. Chaniya did not try to pass the classes she disliked. Chaniya did not want to ask questions because she thought she would not understand the concepts. She once perceived school as boring and not fun. However, her attitude towards school changed. Chaniya enjoys classes that keeps her attention; for example, English is Chaniya’s favorite subject because the content is easy for her to grasp.

**Elizabeth**

Elizabeth is a European-American 18-year-old female senior who attends a private Title I high school and described herself as an unmotivated student. Elizabeth is the only European-American student in the study. Elizabeth struggled academically as a junior; she shared, “High school has been challenging, and the students are iffy.” Elizabeth dislikes teachers who do not teach topics relevant to life after high school. Elizabeth also dislikes teachers who primarily assign test. Elizabeth thinks classes are more enjoyable if the teacher breaks down the material.

Elizabeth enjoyed teachers who cared and loved their students. She also enjoyed classes where students felt accepted. Elizabeth felt a bond with her classmates when she felt accepted, unlike the disconnections she experienced with her teachers and peers in other classes.

### **Mike**

Mike is an African-American 18-year-old male senior who attends a private Title I high school and described himself as a passionate student who lost focus academically. He explained that he was not great in school. He disliked attending school because he did not like waking up early and did not see how he would use the content in the future. However, he said that "Teachers went out their way to help." Mike's favorite classes are physical education and religion. He enjoys these classes because he stated, "I learned things I did not know."

### **Dana**

Dana is an African-American 18-year-old female senior who attends a private Title I high school and described herself as an unmotivated student. Dana stated, "I'm dedicated when I set my mind to something..." When asked about her academic experience she explained,

Freshman and sophomore year was pretty normal until COVID hit and then we had to go virtual for about a year and a half. And that's when my grades started to plummet a little bit because I wasn't used to doing virtual classes. I basically had to teach myself... but as of my senior year and things are going back to normal, so I'm becoming better. And I've also learned how to incorporate virtual learning.

Spanish IV was her favorite class because the class atmosphere was different in comparison to other courses. Dana enjoyed the course because the teacher was supportive. Dana felt students are motivated to learn when they feel understood and comfortable with everyone. Biology was Dana's least favorite class because "It was a lot to remember...in a small

timeframe," and the topics were uninteresting. However, Dana admitted that her lack of effort contributed to her perception of the class.

## **Results**

The results of the study were gathered by analyzing data from individual interviews, photographs that students chose for photovoice, and two focus group meetings. The study data saturation occurred when the participants expressed the same lived experience (Creswell & Poth, 2016; Moustakas, 1994). The photovoice and focus groups meetings revealed in-depth perspectives about the themes that emerged from the interviews. The data were thoroughly analyzed to uncover the essence of the experience (Moustakas, 1994).

The data collection process began with me bracketing my biases to ensure that my biases did not affect my role in collecting and interpreting data (Merriam, 2002; Moustakas, 1994; Sutton & Austin, 2015). I uploaded the audio recording of the participants' interviews and focus group responses into Grain.co to transcribe the data. I saved each transcription as a Word document. Then, I used member checking to ensure the transcriptions' credibility and dependability. The participants reviewed the transcriptions and stated that the findings and interpretation were accurate.

I then immersed myself in the data to generate codes for thematic analysis, codes, and phenomenological reduction. In this process, I listened to the audio recordings and reread the transcriptions at least five times to analyze and compare the data to the research questions (Moustakas, 1994). Then I began generating initial codes (see Table 2) from each data collection method to begin the process of horizontalizing significant statements to produce potential themes (Braun & Clarke, 2006). I then reviewed the themes into clusters and renamed them to provide a textural description of the phenomenon by creating essential code categories to final codes (see

Figure 1). Then I organized themes (Moustakas, 1994). Four themes emerged from the data collected: reduce stress, need for creativity, benefit of mobile technology, and disadvantages of using mobile technology (see Table 2).

**Table 2**

*Theme Development*

Open-Codes	Enumeration of open-code appearance across data sets	Themes	Subthemes
Stress	7	Reduce Stress	Teachers' Personality
Bored	8		
Lacked effort	14		
Books	14		
Notes	20	Need for Creativity	Mobile Technology Improves Learning Support
Creative	10		
Kahoot	8		
YouTube	11		
Quizlet	2	Benefit of Mobile Technology	Organization Engagement College Preparation Accessible
Accessible	15		
Less books	12		
Motivate	60		
Help	91		
Own pace	5		
More time	95		
Engaged	5	Disadvantages of using Mobile Technology	Challenges Teacher Readiness
College	30		
Cheating	11		
Personal Connection	22		
Distracting students	3		

The data triangulation occurred from synthesizing and merging the information using the collection methods of individual interviews, photovoice, and focus group meetings. Data triangulation tested the validity of qualitative research by merging the information from different sources (Creswell & Poth, 2016). The common themes came from the data triangulation to

capture the full essence of lived experiences of using mobile technology in class among LIPHS students.

### **Theme One: Reduced Stress**

The first theme that emerged from the lived experience of LIPHS student was the need for teachers to reduce the stress of learning for students. A quality education fits the learning needs of disadvantaged students (Robinson, 2018). When asked, “What can high school teachers do to make high school more enjoyable?” The participants in the first focus group meeting overwhelming spoke about the stress associated with the teaching style of their high school teachers. When asked “What could high school teachers do to make learning more fun?” A participant replied,

Um, what high school teachers could do to make learning more enjoyable is, um, being able to engage us more instead of just allowing us to come in class and look at the board to take notes, um, like engaging allows students to be more relatable to the topic and, um, being able to discuss the topic so much themselves are my teachers to get student ideas about what's happening as well.

There was a similar consensus about ineffective approaches to learning. Sasha indicated repeated lesson plans were an ineffective and outdated learning style that did not prevent her academic failure. Marcus agreed; he felt the high school math curriculum was “too old and outdated.” When I asked Marcus what did he dislike about his least favorite class during his interview, he stated,

Um, the thing I dislike about my least favorite class, um, I would say the curriculum in which it is being taught, um, because the curriculum is so, um, old and it can hard to

grasp for a new generation of people that is willing to make a change and be a difference in the world.

Jay expressed a similar sentiment. He felt that English was his least favorite subject because the teacher taught “unnecessary material.”

When Jay was asked in the interview what made English his least favorite class, he replied.

I feel like it's my least favorite subject because in, in my opinion, I feel like as students, as an environment, we learn things that we really won't need to use in the long run in college, because we learn about, I believe it's called FANBOYS and onomatopoeia and stuff like that. And it's basically just, I feel like in an English class is okay to a certain extent, but I feel like English classes should only be required to young writers that actually wants to pursue a future or a career in writing, like story, writing, short stories, you know, poetry or whatever.

As a result, Jay felt students did not learn academic content needed for college or life after high school.

Marcus explained that some of his academic challenges were from how the subject material were taught. Mike agreed with Marcus’s idea during two different interviews. Mike disliked World Literature because the teacher lectured the entire class period. Ray also agreed. He indicated U.S. History was his least favorite class because the content was taught in a lecture format. However, Curry spoke about the impact of a lectured style of learning and said, “When the teachers talk for their whole 45 minutes and that's when kids try to skip class and they'll never want to be there when they can go in there.” Dana agreed with her peers. She stated, "Pens and books can get boring.”



### *Subtheme: Teachers' Personality*

The personality of teachers was a subtheme. Jay believed that teachers can have a negative or positive impact on students' perception of learning. Angel stated her least favorite courses had teachers who were discouraging and reluctant to help. Angel explained,

They'll repeat, they'll tell us the lesson or like what we're doing. And then some kids, you know, sometimes they need a breakdown of what we're doing. And sometimes they just, the teacher in himself seemed like they didn't really feel like breaking it down for the kids... Sometimes they had an attitude, they acted more like a student.

Chanel stated that Spanish was her most challenging class because "The concepts were difficult to understand." She added that the teacher's reluctance to help students individually contributed to her poor academic experience. Chaniya felt her math teacher expected her to understand the concepts without providing detailed instruction.

During photovoice, Daniel presented a photo of three students sitting around a clock communicating with one another while one student looked at her mobile device. Daniel compared this photo to an unpleasant learning experience in chemistry. He felt that the teacher was disrespectful and did not make the subject interesting. Sasha described math as her most challenging subject in high school. She stated she could not understand the curriculum and there were too many students in her class on different math levels, and "The teacher is only teaching on one level." Sasha shared that she was discouraged to ask for help. Curry said Oral Communication was his least favorite class because he described the teacher's attitude as "boring," "didn't care," "too laid back," and "didn't hold students accountable." He explained how he did not retain anything because the teacher's lack of effort was unmotivating. He stated, "Students will skip if the teacher is boring."

The participants also described the personality of the teachers that provided a pleasant learning experience. Angel explained that the teachers with upbeat personalities made learning exciting. Chaniya indicated that students enjoy teachers who possess an interest in teaching. Jay provided an example of a class he enjoyed because of the teachers' interest in teaching the subject.

My teacher, um, was actually Mr. Shaff. He's a pretty cool teacher. He was excited to, um, teach African-American history for the first time. And I liked him because I've never seen a teacher so excited to teach African-American history. Like I seen him and as a White teacher, you know, you wouldn't, I wouldn't really expect a, a White teacher to feel as if like, oh, I'm happy to teach my students, which is mainly Black students about their own history, their own race and how he went about the lesson plans. Like he broke down everything he had as doing projects. He had us do our reflections discussions, open-minded discussions, debates, all of that. And I never really had that in a class.

Mike recalled that the excitement of his teacher in his Business Success class made him eager to learn. Chaniya agreed with Mike in a separate interview when she voiced the way the teachers teach can help students grasp concepts. Daniel responded with a similar sentiment when he stated, "The right teacher makes a subject more interesting."

Daniel voiced that teachers should interact with their students. Chanel referred to the impact of her religion teacher, who formed personal relationships with students through daily oral discussions that connected their discussions with the subject material. When Chanel was asked in an interview to describe a classroom experience when students were motivated to learn, she stated,

Um, I will say my religion class, My senior religion class. Um, Mr. Colbert (pseudonym) does like a lot of in the beginning of the class is not necessarily always about, you know, the Bible and stuff. Like he sometimes sits down. I have like real conversations with us about things that's happening in the world as that day or whatever the news is or whatever. And we sit down and we have talks about it. He like just informs us on things. And, um, he kind of tells us like he kinds of, kind of related to the Bible or whatever. And then like, um, he would jump right into the lesson and then a lot of people will be already interested in what he's talking about. So it makes the lesson like a lot better rather than just sit around talking. But it's kind of like a lot of emotion too.

Chanel said that a personal experience made her more engaged. Sasha stated teachers need to build a one-on-one relationship with students to show students that they care; this will help students become more engaged and ready to participate. April agreed and said, having a teacher and student relationship improves the academic experience of high school.

Participants also expressed the impact of a stress-free learning environment. Sasha in her interview described Art as her favorite class because,

Mr. Crane (pseudonym) is really nice and he plays music and like, it's, it's just chilling there. He like all these different paintings up and he, Mr. Crane (pseudonym) is really like, hands-on with helping you. Like he, and he's really like motivational too. Like he knows everybody. You don't have to know how to paint, to take that class. Like he would teach you. And it's like different levels of the painting class. I took all of them. So I'm in his highest class now. And so like, I'm painting like a whole portrait now. Like I'm painting a big canvas right now. So that's fun. And we we've been painting it for like two weeks now. So like when we come in and we go our headphones, you go like, have you

got a snack or something? It's like, it's just an easy class...like it's no stress in there 'cause you work at your own pace and it's your own painting, not copying off of something or taking notes. It's just your own paint. And then you can get a grade for so however much work you put into it is what is the grade you'll get.

The teacher was hands-on with helping and motivating students. Sasha explained that students could listen to music and work at their own pace. Curry shared that Male Chorus was his favorite class because of his relationship with the teacher, who made students feel appreciated. He explained that he did not have to “hide himself.” Curry shared how Male Chorus made students eager to learn. Chaniya thought that teachers should ask questions to help students learn and focus on students who do not comprehend right away. Mike felt teachers who used positive reinforcements like “Good question” after a student’s reply to a question helped him feel engaged and retain more information.

### **Theme Two: Need for Creativity**

The second theme that emerged from the data was the need for teachers to use creativity to enhance the educational experience of students. When asked, “How could you improve your least favorite class?” Angel shared, “I feel like maybe bringing it to the teacher's attention in a more respectful way. Cause I know a lot of kids did complain about that, but it was always like we kids.” As a result, according to Angel, some teachers may be reluctant to change. However, Dana added, “Teachers should be open-minded about learning from...students.” The participants expressed that teachers should incorporate the “voice of students” to improve students’ perception of learning and allow students to engage the learning process creatively. For example, students indicated in the second focus group meeting,

A lot of teachers, older teachers, they probably not equipped with the knowledge of technology. So they'll probably be struggling to how to work the technology. Then the students might have to come in and teach the teacher.

Jay explained during his interview that allowing students to have a voice would benefit students learning by "...allow(ing) students to express themselves the way students want to." Chanel provided an example where her sociology teacher was effective because he listened to students' viewpoints and adjusted the subject content to relevant concepts.

Sasha stated that since students learn in different ways, students need more than one learning platform. April explained that teachers could incorporate different strategies to help students retain the information learned. Ray explained his desired learning environment is a controlled learning atmosphere that allows students to use their creativity. He continued, "This learning environment will prevent students from misbehaving."

***Subtheme: Mobile Technology Improves Learning***

When asked, "How can learning with mobile devices in class improve a learning experience?" Dana said that using mobile technology in the class is "a good idea." Curry during photovoice suggested teachers should implement mobile learning because technology is advancing. He supported his opinion with a photo of a student using a personal device in class while reading a textbook. Marcus expressed the impact of engaging students through media instead of lectures. Angel spoke about attending a class integrated with technology:

I feel like it can improve a learning experience simply because this day and age, it's a lot more technology based and kids are a lot more proficient with technology. That's what they grew up on. So they feel more comfortable with it versus I guess like it's not that you're necessarily old school, but old school methods and stuff. So it, it draws the

attention and they get it done faster and better because that's what they grew up on. That's what they were around.

Ray in his interview emphasized how mobile learning in the class would motivate him to complete his work since he enjoyed using his phone. Chaniya explained how mobile technology would help students complete work. She indicated that teachers “can ask to write a paper on their phones rather than handwriting.”

Dana expressed a similar sentiment:

I think it can be a good idea. I believe that technology is evolving and a lot of students having a book and a pen and paper in their hand can become bored inside the classroom. So, when you incorporate technology, it'll keep the students involved and active. For instance, for my Spanish class, we do a lot of online games... We do this this app called Quizlet and it brings competition into the game. So, it motivates students to want to do better because we have an incentive of winning something. So, I think having technology in the classroom, it can be really effective once if it's used correctly.

Dana shared her experience with mobile learning.

I like when I complete an assignment... It has congratulations and it has confetti popping everywhere. It made me feel accomplishment. I feel like I did something well, it's just all about incentives knowing that you did something well and you accomplished something, it's like, check off your to-do list. It just, you want to do more and be proactive.

Chaniya stated that mobile learning is “Fun for the students.” When Ray described his photograph of a student using mobile technology in a class setting, he stated, “It looks like she's having fun. Maybe like playing Kahoot! or Quizlet by learning vocab in class.” Daniel explained that seeing subject content on technology makes learning enjoyable. Marcus indicated the need

for teachers to incorporate mobile technology within the classroom. Elizabeth felt mobile learning could help students remember content from interactive games. He thought that TikTok would make learning exciting for students. Jay explained how technology could improve his learning experience by helping students expand their minds. Sasha mentioned the convenience of mobile learning.

Jay and Dana agreed when they said that YouTube helped them access rapid information to solve problems in Math. Dana continued,

It gives you a different perspective other than your teacher. My pre-calc teacher, Mr. Nance (pseudonym), where he does is he teach a lesson, but then he also looked up on YouTube videos on different teachers teaching our same lesson differently. And he gives us the option of which way we can learn. And I love that about that teaching technique is because a lot of students don't learn the same way and a lot of teachers don't teach the same way. So therefore, they need, as students, we need different ways to learn different perspectives from different people to teach us. And I think having mobile technology can help that in a classroom.

Jay also indicated YouTube was a valuable resource for his United States History class. Daniel mentioned that Kahoot! encouraged class participation through competition. Chaniya reiterated this idea:

In class. So there's different scenarios where a teacher can use mobile learning. For example, Kahoot! is one way like they could be playing a game and ask the students to log in and respond that way on the phone.

Ray found Kahoot! and Quizlet to be effective for memorizing vocabulary words.

Elizabeth felt students would feel encouraged to complete a Kahoot! mobile online assignment. Dana said Kahoot! and Quizlet can motivate students to participate, especially if students have an incentive to win. Jay agreed: “Activities give students ways to learn.” Jay indicated he enjoyed activities that allowed him to express his creativity.

### **Theme Three: Benefits of Mobile Technology**

The third theme that emerged from the lived experience of LIPHS student was the benefits of using mobile technology in class. Research indicates that a learning environment that allows students to learn at their pace help struggling students complete coursework (Al-Adwan et al., 2018; Ali & Arshad, 2016; Hamidi & Chavoshi, 2018; Yüksekdağ, 2016). Chaniya felt that mobile learning is effective when used correctly and motivate students to complete assignments. Angel spoke of the benefits of using mobile technology in class. She stated,

It's fast. It works faster for me, at least because I'm in a class, I'll have to be focused on it. It is on my phone. So, I work way faster on my phone that I will write it, type it and stuff. It's just easier. So, I feel like that that's different. Cause I'm more in the zone of learning instead of outside of school or something.

Mike, during the photovoice, presented a picture of a student taking notes in front of two mobile devices while wearing headphones. He said, “You can definitely focus with the computer in front of you do work. Sometimes it's easier. Sometimes kids don't want to come to class and talk... they can just work on their work.” Chanel also reiterated this idea when she said mobile learning is a strategy that gives students an independent feeling of not being rushed to complete an assignment.



***Subtheme: Organization***

Another subtheme that emerged from the data was organization. Daniel and Ray felt that using mobile technology helped with organizing course material. Dana explained,

It can be good for organizing like you, haven't a whole bunch of papers and no books scattered everywhere. You can't really be organized at all in your book bag, but if you have everything in a folder on a desktop that can really help improving your grade, because you know where everything is at, everything is in a quick place, which is easy to access the technology for your work. I found that that was very helpful.

Daniel agreed with Dana when he noted mobile learning “makes some students more accountable.” The participants explained the academic benefits of being organized. Mike stated learning on mobile devices helped him keep track of his completed and incomplete work. He said his academic performance improved because he could revisit the assignment's instructions and receive a grade right after completing the work. Daniel and Ray related that being organized helped them complete assignments quicker.

***Subtheme: Engagement***

Angel said “laid-back students” can benefit from an engaged learning environment. Students stay engaged while learning because the lesson is fun and easy to follow. Teachers can help students stay engaged with mobile technology by having students answer questions while interacting with technology. “Students will feel more comfortable to participate and feel like they don't have to complete work alone,” she explained. Angel provided a photo of a student working quietly on a computer with a phone in front of him. She explained, students could learn from sharing material with other students.

I feel like you can not only learn from your school, but you can learn from other people's schools as well, so that because you can share that knowledge, like it's on your phone or whatever it down to, like, for example, if you have an iPhone you can FaceTime and you can screen share. So like if you got a friend from a different school, are they looking at it with you? Like if you're going through history and stuff, they're like, oh, I didn't know this happened. And that happened. They can share that knowledge. It's easier to share in the more knowledge...it easier and also more accessible. So people who want to have a higher education, but don't have the ability to get it.

Daniel provided an example of an engaging lesson with mobile technology. He indicated that using mobile electronics during lectures can help students engage the lesson and improve students' academic performance.

***Subtheme: Support***

Marcus and Daniel expressed using mobile technology in class benefits the teacher and student. Chanel added mobile technology helped students interact more with their teachers and peers. Elizabeth agreed, mobile devices helped students interact with the teacher. Marcus added, teachers have more time to support students in need. Elizabeth mentioned the benefit of privately messaging teachers a question rather than asking a question aloud. Elizabeth added, in return, that students grasp concepts faster. April conveyed that mobile learning in the class helped students complete missing work and provided additional support. April expressed, a "...mobile device will help me remember the things I read." She also explained that learning on a mobile device helped her understand certain concepts, provided different learning strategies, and helped students complete assignments on time, save their work, and get help from others.

***Subtheme: College Preparation***

Students agreed in the second focus group meeting that mobile technology helps with college preparation. It was noted, “It can prepare you for college because college isn't really like school. Like in college, you can use technology, you can use a laptop, they don't care.” Another student in the second focus group meeting continued,

I also agree with them too. You know, in college you have to start using, uh, technology that's most definitely, um, enforced these days as well. So having technology and mobile learning in class will help, uh, ready for that.

A similar sentiment was expressed within the same focus group,

And I agree. Um, technology is a new way where everybody can communicate and do a lot of things on. And I feel like technology can really prepare for college or just for taking classes outside of school, preparing them.

***Subtheme: Accessible***

Marcus presented a photo titled distance learning benefits are more obvious than ever. The three stated benefits were flexible, easy access, and less cost. Marcus explained the accessibility of using mobile technology during photovoice.

The photo that I chose...[is] from the internet is distance learning. Benefits are more obvious than ever. The reason why I chose this is because mobile learning is, um, flexible. Um,... students shouldn't feel pressure to turn in assignments, not only that, but it's easy to access. Um, I felt as though I feel as though throughout, um, this pandemic, um, internet has been easy to access students, being able to get online, to get online and actually learn, um, is, uh, creating them to be, um, have easier access to their learning. Um, and last but not least, I feel like, um, mobile learning can be less expensive, less costly, um, simply because you don't have to go to school to learn, um, it save on gas, it

saves on, um, what else? Lunch for an example, um, if kids can be able to learn from home, um, I could save a lot with that as well.

#### **Theme Four: Disadvantages of using Mobile Technology**

The fourth theme to emerge from the data was the disadvantages of using mobile technology in class. Insight about the weaknesses of incorporating mobile learning in an educational setting will help educators develop the best ways to integrate technology (Chee et al., 2017). The participants provided a thorough response to “explain the challenges of using mobile technology in class.” Sasha stated, “Students need more updated technology.” Mike said the internet connection and students browsing outside prohibited websites were two of the greatest challenges of using mobile technology in class.

Chanel thought that mobile learning takes away from in-person learning. Therefore, she considered mobile learning more difficult than in-person learning. Angel seconded,

I feel like I have to put a lot more concentration into it on my phone versus if I'm just doing a hands-on simply because I've been doing it hands on, I'm used to it. So, I'm more efficient with it. Therefore, more comfortable with it.

Chanel also mentioned that mobile learning might distract students from learning.

Chaniya added that some students may be more focused on their phones than the teacher and unmotivated to learn. Daniel spoke about undisciplined students becoming distracted:

I just will say there has to be like a way to make sure, make sure the kids are accountable because I noticed some people in class who would just like go off and like just maybe watch a movie, watch Netflix or just do something that's not like related to like the learning.

However, Sasha and Marcus disagreed with Chanel, Chaniya, and Daniel. Marcus's experience was that learning with mobile technology causes less class distractions. Sasha described her photograph and expressed how mobile technology prevents students from being disruptive. She stated, "So this show what the students should be doing and just show them like this. This is what you should be doing on your computer. Not distracting others. Just doing your work."

***Subtheme: Challenges***

Curry considered personal mobile devices a benefit since most students have access to their phones. In a separate interview, Elizabeth disagreed with Curry, saying there is a difference between learning with phones compared to Chromebooks. Daniel stated the same sentiment; he thought teachers should provide students with Chromebooks and explain how to use the device for educational purposes. Chaniya presented a photo of a teacher instructing a class with the same mobile device that students were using. She explained that schools should provide students with tablets or iPads. The Chanel and Elizabeth added that schools should provide electronics to prevent students from getting distracted on their personal devices.

Sasha expressed the importance of restricting students from cheating while learning with mobile technology. Elizabeth, Danny, Ray, and Jay seconded this when they expressed an opinion that cheating is a major disadvantage of using mobile technology in class. Jay felt that mobile learning was not a helpful solution because mobile learning is a "corrupt way and easy way" to learn. He explained students could easily look up lesson plans. He felt "technology corrupts students' minds."

Although in separate interviews, Sasha, Elizabeth, Danny, Ray, and Jay expressed the challenges of using mobile learning in class, Chaniya, Elizabeth, Danny, and Ray provided

solutions to prevent students from cheating while using mobile technology. Chaniya, Elizabeth, Danny, and Ray suggested that mobile technology provided by the school would prevent students from accessing outside websites. Danny mentioned that teachers could have a central monitoring screen to ensure that students stay on prohibited sites. In addition, Dana in the second focus group meeting explained that teachers should build trust with the students, establish strict guidelines, walk around the class, and sit at the back of the class to monitor the students' mobile activity. Ray and Elizabeth shared the same belief during two different focus group meetings. They voiced that mobile learning was effective when teachers surveyed the room to ensure that students remained on task. Elizabeth added that teachers should create a reward and consequence system as an incentive for students to stay productive on their mobile technology in class.

### ***Subtheme: Teacher Readiness***

During Curry's interview, he said students would want to use mobile technology if teachers taught students how to learn with a mobile device because most students like using their phones. When asked "How would you like to see the photograph used in a mobile learning class setting?", April shared, "I would like to see my photo use as an example to other students on what to do while they are learning." However, Angel indicated that in her experience, teachers did not use technology correctly for the students who were not familiar with learning with mobile technology. The participants in the second focus group meeting expressed that older teachers were more reluctant to incorporate technology than younger ones. Daniel also admitted that to be effective, teachers need the correct tools to utilize technology.

### **Research Question Responses**

One central question and two sub-research questions guided this transcendental phenomenological study to understand the essence of the lived experience of self-described

unmotivated high school seniors attending a private Title I high school. The student participants described their educational experience of mobile learning and their learning experience without mobile technology in class. There were vast differences between the viewpoints of the participants. The individual interviews, photovoice, and focus group sessions responded to the research questions.

### **Central Research Question**

The central research question was “What is the lived experience of low-income private high school students using mobile technology in class?” The lived experience of the LIPHS students with mobile technology is that mobile learning is effective when used correctly. The need for in-class creativity is the theme that addressed the central research question. For example, Jay stated that students would benefit from teachers learning “the right way” to engage students with technology. In her interview, Dana described a learning experience where her math teacher used YouTube to explain different techniques for completing a math equation. She felt that this form of teaching helped students quickly grasp concepts. Dana, in the interview and focus group session, mentioned the effectiveness of teachers monitoring students when using mobile devices and suggested that schools can help students stay focused by providing mobile technology that blocks unauthorized websites. Marcus expressed that mobile learning prevents student distraction. April stated, “Mobile learning is a way teachers can help students through just in case they miss school or even just needing that extra help.” April said,

I like learning with technology in the classroom to help me stay up to date with learning, how to turn in the assignments. Just in case we do go back virtual. It’s a good way to stay up there just in case something do happen. And like I said before, it’s also just a good way to check in that missing work that you do have.

### *Subquestion One*

Subquestion One was “What is the academic impact of using mobile technology in the classroom among low-income private high school students who accept technology as a benefit for learning?” The academic impact of using mobile technology with LPHS students in the classroom is that mobile learning can help students retain knowledge (Chen et al., 2016) in all academic subjects (Rataj & Wojcik, 2020). The benefits of students using mobile technology is the theme that addressed the first subquestion. For example, in her interview, Angel thought that mobile learning had an impact on her academic experience because typing helped students learn faster. Chaniya felt using mobile devices in the class motivated students to complete assignments. Angel provided an example of a laid-back classmate who benefited from mobile learning:

Um, well with this specific student right here, I know he’s kind of a laid-back lazy type of person. He don’t do the work until the end of the class, but when he brings out his computer and he does the work during the class, like when we watch PowerPoints and stuff in that class, he takes the quiz while watching the PowerPoint and he gets the work done fast, or sometimes he gets it faster than me and I’ll usually be on top of it. So I know for him, technology really works for him. And I know for a lot of kids in that class specifically, it do work better for them. So, I guess being on technology while doing the class does help in cases like that.

April conveyed that mobile learning in the class helped students complete missing work and provided additional support. April expressed, a “...mobile device will help me remember the things I read.” She also explained that learning on a mobile device helped her understand certain



concepts, provided different learning strategies, and helped students complete assignments on time, save their work, and get help from others.

Daniel indicated mobile learning “makes some students more accountable.” Mobile learning in class can improve students’ academic performance by using mobile electronics during lectures. Mike stated learning on mobile devices helped him keep track of his completed and incomplete work. He said his academic performance improved because he could revisit the assignment’s instructions and receive a grade right after completing the work. During two separate interviews, Daniel and Ray stated that mobile learning helped them complete assignments quicker, become more organized, and communicate outside the classroom with peers and teachers. Jay expressed a similar sentiment during photovoice. He presented a photo of a female with a notebook and a phone. The person appeared to be using her phone to take notes. When Jay was asked “What are the other benefits socially and personally of using your suggestion in high school?”, he stated, “it helps them connect with their peers or doesn't even have to be their periods.”

Many participants spoke to the accessibility and convenience of mobile learning. April found material and information to complete assignments with mobile technology because mobile technology is easily accessible and convenient. Sasha in a separate interview echoed the same concept and agreed that mobile technology has convenient benefits for learning. For Marcus, mobile learning helps students complete assignments because “students will not be pressured in time” due to technology being easily accessible. Ray shared the same belief that the accessibility of technology helped him learn.

In separate interviews, Curry and April also stated how accessible mobile devices are. They indicated students were motivated to complete assignments because it takes less effort to

complete assignments on the phone than on a worksheet. Curry felt that students would complete assignments on time since “no one is forgetting to pull their phones out.” Curry believed mobile learning improves students’ learning experience because “assignments can help students interact with others; they would help students learn because they enjoy talking.”

### ***Subquestion Two***

Subquestion Two was “What personal or social benefits will low-income private high school students who accept technology as a benefit for learning receive from using mobile technology in the classroom?” The personal and social benefits of the LIPHS students with mobile technology is that shy students benefit socially and personally from using technology in class because technology allows students to communicate with peers, which in turn gives students confidence. The benefits of students using mobile technology addressed the second subquestion. For example, Jay’s photo of a student using her phone to take notes explained his statement, “depending on the situation. It gives confidence...if the person is shy.” April provided a photograph of three students working together on a mobile device. April explained that mobile learning will help students communicate more. Chanel agreed when she provided a photo of five students sitting in a group using their phones. During the photovoice she explained,

Social? I will say, um, it’ll probably be better for them (students) to like talk to one another on like a(n) electronic, rather than talking to the person. Cause some people, they may be like shy or scared to actually speak to someone else. So, um, I feel like it would be better for them to rather do it, do it over a screen to like stay in, for instance, they want us to go to a student to ask for help or to explain something that a teacher may not have explained right. Or understanding it would probably be better for them and less embarrassing if they would do it over a screen rather than face-to-face.

Daniel also echoed the same idea in the statement,

Um, honestly, I think the idea is pretty good. You know what I'm saying? We live in a world where like electronics and everything is like super important, you know, and honestly, you're probably gonna need it in real life experience. So, the best way to do that is in classroom.

Chaniya shared that mobile devices help students learn new technologies and complete work when the teacher is not around. Daniel agreed that mobile technology is important for “real life” and prepares students for the future. Elizabeth shared the same sentiment. Mobile learning can help students gain skills for the future. Daniel indicated that learning with mobile technology helps students type faster because students who are “slow types” will get more practice. Ray and Dana also indicated that mobile learning helps students outside of school and after graduation since the students would have become familiar with using technology. Dana, in her photovoice, expressed a similar sentiment when she explained her photo of a class of students writing with a mobile device in front of them. She stated, “Students can get a good job if they use technology.” Elizabeth expressed a similar response about the benefits of learning with mobile learning during her photovoice of students using mobile technology in class. She explained, “they can also learn like rewards for like the future, like for jobs.”

### **Summary**

The purpose of this transcendental phenomenological research study was to understand the perceived impact that mobile learning has among low-income, private high school students (LIPHS) at a regionally accredited high school located in the Midwestern part of the United States in order to prevent students from leaving school early. The participants' lack of motivation stemmed from COVID-19, their perception of high school teachers, and academic coursework.

Despite the variety of their reasons for being unmotivated, the participants indicated the benefits of using mobile learning in the class. Some participants expressed more displeasure than others. However, most of the participants were in favor of using mobile technology to improve their high school academic experience.

There were 11 Black participants between the ages of 18-20, one Asian-American participant, and one White participant. There were seven female participants and six male participants. All the participants attended the same private Title I high school. The participants knew one another and shared many of the same experiences in terms of the classes they were required to take for graduation. One student indicated that he had transferred his sophomore year.

Four themes and nine subthemes that emerged from the data. First, the participants explained the need for teachers to reduce the stress of learning. In the second theme, the participants expressed that creativity in learning with mobile technology would improve students' learning experience. The third theme focused on the personal, social, and academic benefits of using mobile technology in class: students would become engaged. Many participants expressed the advantages of using mobile technology in school to benefit them outside of school. The last theme was the disadvantages of using mobile technology. The challenges of preventing distractions and cheating and teacher readiness were the two disadvantages of incorporating mobile technology in class. The participants also provided vital solutions to prevent creating and distractions from occurring. Those solutions included providing educators with the right resources to implement mobile learning effectively.

The central research question explored the lived experience of using mobile learning in class to grasp students' perception of mobile learning. The participants considered mobile learning as effective for helping engage and motivate students to improve academically while

also indicating the need for teacher readiness and restrictions to prevent students from getting distracted and cheating. Subquestion One addressed the academic achievements of students.

Unmotivated students can benefit academically from using mobile technology in comparison to a traditional learning style. The participants mentioned that classrooms with technology are more appealing and fun to attend. Subquestion Two addressed the social benefit of unmotivated students using mobile technology in class. Participants felt using mobile technology in class prepares them for college or job skills since technology is rapidly advancing.

## **CHAPTER FIVE: CONCLUSIONS**

### **Overview**

The purpose of this transcendental phenomenological study was to determine the perceived impact that mobile learning has among low-income, private high school students' (LIPHS) at a regionally accredited high school located in the Midwestern part of the United States in order to prevent students from leaving school early. Chapter Five begins with the interpretations of the study's results and a summary of thematic findings. Following this, the implication of policy and practice, theoretical and methodological implications, limitations and delimitations, and recommendations for future research will be discussed.

### **Discussion**

The research design of the study aligned with the study's theoretical framework. The technology acceptance model (TAM), developed by Davis (1989; Davis & Venkatesh, 1996), described a person's reason(s) for accepting technology (Naeini, 2012; Wu & Chen, 2017). The participants described their lived experiences of using mobile technology in the classroom. To organize the study's findings, this chapter addresses the interpretations of interpretations of findings, implication for policy and practice, theoretical and empirical, implications, limitations and delimitations, and recommendation for future research.

### **Interpretation of Findings**

This section discusses four thematic findings from the data collected. The interpretation of the findings includes reduced stress, need for creativity, benefit of mobile technology, and disadvantages of using mobile technology. As a result of the thematic findings, subthemes developed. For example, the theme of reducing stress included the subtheme of teachers' personalities. The theme of the need for creativity included a subtheme about how mobile

technology improve learning. The theme of benefits of mobile technology included four subthemes: organization, engagement, support, college preparation, and accessible. Finally, the theme of disadvantages of using mobile technology included the subthemes of challenges and teacher readiness.

### ***Summary of Thematic Findings***

The first theme that emerged from the data was reducing stress. Teachers' personalities emerged as a subtheme. The student participants addressed their displeasure about specific academic environments that they felt contributed to their lack of interest in the teacher, subject, or course. The style in which a teacher taught disengaged many participants. Teachers with unpleasant attitudes prohibited students from learning. The participants specified the reasons that produce learning barriers and provided ways to correct their learning environment.

The need for creativity is the second theme and is a direct response to the stress of learning that the participants experienced. A subtheme is that mobile technology improves student learning. Teachers who taught with creative learning styles were more effective in helping students become and remain engaged. These teachers also made learning less stressful; as a result, students enjoyed learning. Learning with mobile technology was considered crucial for making the learning process creative. The participants specified that mobile application was effective for in-class learning. Mobile learning enhanced students' readiness and engagement because of the additional support the students could receive from rapid access to information and communication.

The third theme was the benefit of mobile technology. Organization, engagement, and support emerged as subthemes. There were three benefits associated with using mobile learning: personal, academic, and social. The participants' personal benefits included having the option to

learn at a pace that did not make them feel rushed. Academic benefits included becoming motivated to learn and engaged. Social benefits included attaining skills to use outside of school.

The fourth theme that emerged was the disadvantages of using mobile technology. Challenges and teacher readiness emerged as subthemes. There were several concerns with using mobile technology in class; students getting distracted, and cheating were the most serious concerns. There was also a consensus among the participants that technological issues could interrupt learning. Subthemes emerged from the students' interest in preventing the disadvantages from occurring, including teacher readiness to overcome the challenges of teaching with mobile technology. The interpretations of the four themes and nine subthemes were based on the thematic analysis.

**Teachers' Presence.** The students struggled academically with distant learning because of COVID-19 during the 2020-2021 school year. The participants expressed their displeasure with learning virtually during the pandemic. One of the displeasures of virtual learning, according to Curry and Elizabeth, is that students lost the chance to physically interact with their teachers. Curry and Elizabeth continued to explain the disadvantages of virtual learning in comparison to mobile learning in the classroom. They stated students were discouraged from learning because teachers were not physically present to help. In the first focus group session, it was stated, "kids may need one-on-one type of attention." Despite their perception of virtual learning during the pandemic, the shared belief is technology enhances learning in the classroom. Students feel more confident learning from mobile technology in the class because the teacher is present. The findings suggest students enjoy learning with mobile technology in class because of the direct support of teachers.



**Seeking Help.** Some of the participants considered the possibility of using mobile technology in class to communicate with teachers instead of expressing questions or concern verbally. This may cause students to ask questions they would not normally ask in front of their classmates. Some of the participants mentioned that students could receive personalized attention during independent in-class mobile learning sessions. Additionally, teachers have more time to address students' individual concerns by walking around to monitor class activities. Mobile learning provides students additional indirect and indirect support. Mobile technology will provide academically unmotivated students an opportunity to seek help in the class without letting their peers know.

**Collaborative Learning.** The participants spoke about their experience with collaborative learning. They enjoyed working in small groups, completing projects, and having in-class discussions and debates. Education that allows students to interact is motivating. April mentioned that class discussions allowed her to learn from her peers. However, collaborative learning was also effective in a mobile class setting. The participants enjoyed learning with Quizlet, Kahoot!, YouTube, and TikTok apps. They perceived the application as an enjoyable learning experience that increased classroom participation. Ray felt a learning environment should be engaging and interactive. The findings suggest that mobile technology enhances collaborative learning because it increases students' in-class mobility. Also, collaborative learning develops the academic skills of students who are unmotivated to learn because they are given the chance to interact and learn from their peers.

**Sense of Belonging.** A sense of belonging helps students participate and complete work. Curry, Sasha, and Elizabeth described having a sense of belonging in class. Curry enjoyed a class environment where he could be himself. Sasha was more productive in classes where she felt

comfortable. Elizabeth, too, felt comfortable in classes where she felt that the teacher loved and cared for the students, although Elizabeth mentioned that she did not experience a sense of belonging in most of her high school classes. However, a learning environment that allows students to feel a sense of belonging will motivate students to learn. Mobile technology provides students the sense of belonging because of the equity that mobile learning offers students. Each student is given a chance to be a part of the learning process, while experiencing learning at their pace.

### **Implications for Policy and Practice**

The study's findings revealed significant empirical, practical, and theoretical implications for policy and practice. The results exposed how LIPHS experienced distress within a traditional learning setting. The study also revealed that schools should provide students with updated technology with site registrations to prevent cheating and learning distractions. Federal policymakers and high school districts can use these implications to improve the educational experience of LIPHS.

### ***Implications for Policy***

The data from this study revealed that mobile technology is an engaging and enjoyable teaching method for high school students with low motivation. A participant in the first focus group meeting believed that schools should provide technology for students instead of students using their personal devices, which may cause distractions and caused potential safety issues.

The participant stated,

I would say school should supply... because if your kids are bringing their own, we don't know...what they could be doing, but versus if a school supplies, so they would be

tracking, you know, what students are looking at and shut down anything that...cause them a distraction in this, uh, mobile learning setting.

As a result, federal policies and school districts should require Title I high schools to incorporate mobile learning within their educational curriculum. It should also be mandated that Title I high schools be required to provide mobile technology less than four years old to each student. The federal and the state government are aware of the educational disparity among low-performing schools with students from low-income families (Robinson, 2018). As a result, the federal and the state government should provide Title I schools with updated mobile devices for every student to implement the change. Emily expressed during the second focus group, “schools should provide the technology to make sure students are not able to go to different websites.”

Federal funding would ensure that every student has an updated device while learning in school. The older devices with Wi-Fi connections could be given to students and their families that can show economic hardship. These students would have access to a working device at home. In addition, schools should have extra mobile technology available to replace non-working mobile technology. All school electronics devices should have a tracking device and should restrict students from leaving their mobile learning sites. The restrictions will deter theft, cheating, and distractions.

### ***Implications for Practice***

Teachers should be properly prepared to integrate technology in the classroom (Drake & Reid, 2018; Lawless, 2016; Shirley, 2018). For example, while it is clear that students consider mobile learning an effective learning resource, mobile learning may also be more effective if teachers are correctly trained on how to incorporate mobile technology in the class. Shirley (2018) explained how some schools do not properly implement educational technologies into

their classrooms. Several participants shared that some of their teachers were ineffective in using technology. For example, Curry mentioned that during the pandemic, teachers posted assignments without facilitating and providing quality instructions. In addition, Angel noted her older teachers' reluctance to incorporate technology as compared to her younger teachers, who were more comfortable with implementing mobile technology in class.

It may also benefit teachers to learn how to differentiate instructions in a mobile class setting. Students should get the same educational experience when using mobile technology as they might in a traditional learning setting. Students at different grades levels will need accommodations and manipulatives to guide their learning process. However, mobile technology should not become the teacher. Teachers should use the mobile technology as an educational resource instead of a substitute replacement. Elizabeth explained, "I feel like it's also harder to explain stuff in a text message." The findings suggest mobile learning should not replace the instructional part of the lesson, since mobile technology could prohibit students from getting a direct response from their teacher.

Administrators should employ a school-wide emphasis on using mobile learning. Creating and implementing a mobile-learning curriculum may also be an effective approach to ensure the learning structure of each class is the same. For example, administrators could require a blended learning environment. Teachers could be required to teach using their in-class mobile technology two days a week. This will ensure that they use different teaching styles. Sasha expressed that since students learn differently, it is an effective to use more than one style of teaching. April agreed that incorporating different strategies enhances the educational experience of students.

School leaders should use the correct procedures to ensure the mobile learning classroom produces academic results. The first and third Friday of the month standardized assessments are needed to measure students' growth in reading, writing, and math. Data analysis could help identify the academic concerns of the entire student population. The results could help school leaders address students' academic weaknesses and ineffective teaching strategies. Additionally, providing incentives for specific benchmarks will help students excel academically. Importantly, school leaders should keep track of each students' device usage time. This will help identify struggling students. The usage time should also be a part of a students' participation grade. This will be an incentive for students to use their mobile devices.

### **Theoretical and Empirical Implications**

The theoretical implications of the technology acceptance model (TAM) derived from Ajzen's and Fishbein (1975) theory of reasonable action (TRA) is viable when conducting research on mobile technology among LPHS students (Buabeng-Andoh, 2018; Taherdoost, 2018). The findings of the study supported the theory that the likeliness of a person adopting technology depends on the perceived usefulness and perceived ease of use of operating technology (Davis, 1989; Taherdoost, 2018). The participants made it clear that they enjoyed using mobile technology in the class because they were easily accessible and convenient.

Hirn et al. (2018) explained that many students who attend eligible Title I schools are from low-income families who lack academic resources (Nikou & Economides, 2018). As a result, socioeconomics affects at-risk students' motivation to achieve academically (Nowicki et al., 2004). The 13 participants confirmed the research study's sentiment. The participants did not believe that their challenges came from their family's social-economic classification, even though they self-described as low income.

The participants' lived experiences supported empirical implications from prior studies. The participants confirmed the academic benefits of using mobile technology in class. Current studies express the educational benefits of using mobile learning (Crompton & Burke, 2018). Gan and Balakrishnan (2016) argued that mobile learning is an educational practice that provides educators with a viable solution to improve achievement gaps. Wishart (2017) indicated mobile learning would decrease the achievement gap among at-risk students. In addition, Groccia (2018) argued that student engagement is the best predictor of learning. The findings of this study agreed that mobile learning in class motivates in-class engagement and improves the academic performance of academically unmotivated students.

The study indicated personal development will help teachers implement technology integration (Drake & Reid, 2018; Lawless, 2016; Shirley, 2018). The participants expressed their displeasure about teachers' reluctance to adapt to the new engaging educational model (Shirley, 2018). However, Bano et al. (2018) reported that teachers are not to blame for being unprepared to implement technology for learning. These reports were not confirmed from this study, because the participants do not have any knowledge of the professional development that their teachers received. The participants only expressed the need for professional development among older and reluctant teachers. However, the lack of familiarity with technology could prevent teachers from adapting to new technologies which were indicated in previous studies (Drake & Reid, 2018; Lawless, 2016).

According to research, game-based learning platforms are an effective way to deliver education (Chen et al., 2016; Rataj & Wojcik, 2020). Rataj and Wojcik (2020) mentioned the effectiveness of using Kahoot!, a game-based learning platform, and Quizlet, a learning platform with learning-tool games, to improve learners' academic achievements because gaming helps

students incorporate knowledge (Chen et al., 2016). The findings of this research study included Kahoot! and Quizlet as effective mobile applications that are beneficial for helping students study for tests.

Bouck et al. (2020) and Heflin et al. (2017) explained that mobile learning can become a distraction. Although participants found mobile learning to be a creative way to learn, they confirmed the findings of empirical research studies (Bouck et al., 2020; Heflin et al., 2017). All participants perceived the challenge of preventing students from becoming distracted and cheating as the disadvantages of using mobile technology in the classroom. Elizabeth explained that mobile-device distractions could cause students to become disengaged with the teacher and coursework.

### **Limitations and Delimitations**

The study's limitations could be considered a perceived weakness (Joyner et al., 2018). For example, the regional location of the participants was a limitation. Geographical trends may have contributed to the study's results since all the participants lived in the Midwestern part of the United States. Additionally, a candidate's identity can influence their rationality of technology and its perceived impact, so the narrow racial and ethnic identities involved in this study could be a limitation. Most of the participants were African American with the exception of one Asian and one European American student. This information is vital in determining the effect of technology among high school students because one subgroup could benefit more than another.

Other limitations are related to the design of the research study. For instance, the study only collected the lived experiences from students, without exploring the perceived impact of mobile learning from parents, educators, and administrators. The differences between the

stakeholders are pivotal. Other limitations of the study related to the study's qualitative research design. For example, not all participants attended their focus group sessions. Data were lost from the absences of those participants. It is also assumed that participants were interested in participating and comprehending the research question, which could influence the way questions were answered.

The delimitations of the study involved the study boundaries imposed by the researcher to generate precise data (Joyner et al., 2018). For example, participants were required to self-identify themselves as unmotivated. The delimitations do not offer details from students who do not identify as unmotivated students. Also, the transcendental phenomenological research design was interested in lived experience rather than an interpretive research design like hermeneutical phenomenology (Creswell & Poth, 2016; Moustakas, 1994). The perception of students who attend a Title I high school may differ from students who attend non-private Title I high schools. The size of the study was also a restriction that may exclude perceptions. Students over the age of 18 were the only participants, excluding viewpoints of the typical age of high school students; the study excluded freshman, sophomore, and junior students.

### **Recommendations for Future Research**

Future research would benefit from precise data from the lived experience of high school students who attend a school located outside the midwestern part of the United States to help assess the comparisons between regional school districts. Information from the northern, western, and eastern parts of the United States are missing. Data from multiple sites will present a broader range of perspectives about using mobile technology in class.

Future research studies on mobile technology should assess the role that age, gender, and race play in determining the impact that mobile learning has on high school students. The data



will provide secondary education with comparable knowledge to determine students' most effective learning styles based on their age, race, and gender. Future studies that define the distinction will help stakeholders assess how to properly distribute technology without causing a hindrance among students and teachers. In addition, more subject-specific research studies will help determine if perceived impact differs among subjects. Additional research will improve the way educators and students use mobile learning to enhance an educational experience.

Studies that assess the effectiveness of mobile technology using different mobile applications will help educators determine which application is the most resourceful depending on the student's grade, race, and age. The way students are assessed using mobile technology could help improve achievement gaps among students from different socioeconomic statuses. Studies could compare how well students can apply things learned while using mobile technology instead of only having students remember concepts. The information could help researchers consider the best practices to use in class to help students become creators and generate new ideas.

The exploration of adding technology to common core standards of education could drastically impact how students learn and are assessed. Today's assessments comprise general subject content with the exclusion of technology intelligence. Researchers could consider a theory that would adequately score a technology intelligence standardized assessment to analyze students' learning outcomes. This assessment would be in combination with the original core subjects. The assessment results could help schools determine the curriculum and degree path for high school students who perform well on the technology intelligence assessment but not on the traditional standardized assessments.

## Conclusion

The purpose of this transcendental phenomenological study was to gather the perceived impact that mobile learning has among low-income, private high school students (LIPHS) at a regionally accredited high school located in the Midwestern part of the United States in order to prevent students from leaving school early. The theoretical framework of this study was the technology acceptance model derived from Ajzen's and Fishbein's (1975) theory of reasonable action (Buabeng-Andoh, 2018; Taherdoost, 2018). TAM identified that users' perceived usefulness and perceived ease of use to describe a person's reason(s) for accepting technology.

Since poverty is linked to low academic achievement (Pfister, 2018), the educational practices in Title I schools are a concern (Coburn et al., 2016; Koedel et al., 2017). As a result of the poor educational practices in Title I high schools, high school students are dropping out of school (McDermott et al., 2019). This study sought to improve the quality of education by collecting data from self-described unmotivated high school students. Thirteen self-described unmotivated high school seniors participated in the study. There were six male participants and seven female participants. The population of the participants were African-American except for two students; one was Asian-American, and the other was European-American. Individual interviews, photovoice, and focus groups captured the essence of the participants' lived experiences. Four themes and nine subthemes emerged during data analysis.

The research uncovered two critical aspects. First, the participants confirmed the results of countless empirical research studies. As a result, the data from this research study confirmed a crisis in secondary education (Coburn et al., 2016). Students perceived traditional learning as stressful and outdated. Lectures were perceived to be the worst teaching method and caused students to withdraw from learning. Sasha and Curry felt teachers should be cautious of lecturing

too long. However, the countless examples explained how mobile technology can improve the quality of education (Kainz, 2019; Sharples et al., 2009) if mobile technology are implemented corrected.

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