

ALITERACY TO LITERACY: AN APPLIED RESEARCH STUDY  
TO SOLVE ELEMENTARY READERS' ALITERACY PROBLEMS

by

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Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

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## ABSTRACT

The purpose of this applied research study was to solve the problem of aliteracy for upper elementary readers at an after-school program, Smith Academy (a pseudonym), and to design a reading program to address the problem. Offering high-interest books to children who are reading below grade level could stimulate their enjoyment of reading and increase the amount of reading that they do. The more a person practices any skill, the better he or she becomes at it. The benefits of reading are well-documented, yet many children become either non-readers or reluctant readers by the end of elementary school. By addressing the areas of choice, time, access to books, self-efficacy, and reading motivation, educators can improve their students' reading attitudes and increase their reading volume. This applied research study involved elementary grade readers from approximately six different elementary schools in discovering their reading attitudes and improving their reading attitudes. Interviews with the students, as well as a focus group with their teachers, and a survey taken by the students indicated the children's' attitudes toward reading. Overall, the results demonstrated that there are multiple ways to improve elementary readers' attitudes toward reading, which may help solve the problem of aliteracy.

*Keywords:* aliteracy, reading motivation, early literacy motivation, upper elementary reading

### **Dedication**

This paper is dedicated to my father, whose support and encouragement have helped motivate me throughout the course of this study.

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### **List of Abbreviations**

Accelerated Reader (AR)

Free Voluntary Reading (FVR)

Institutional Review Board (IRB)

National Assessment of Educational Progress (NAEP)

Organisation for Economic Cooperation and Development (OECD)

Reading is Fun (RIF)

Response to Intervention (RTI)

Scientifically-Based Reading Research (SBRR)

Self-Determination Theory (SDT)

Socioeconomic Status (SES)

Sustained Silent Reading (SSR)

What Works Clearinghouse (WWC)

## CHAPTER ONE: INTRODUCTION

### Overview

The purpose of this applied research study was to solve the problem of aliteracy for upper elementary readers at Smith Academy (pseudonym) and then to design a reading program to address future aliteracy problems. The problem is that for the approximate one third of children who arrive at school with little or no relationship toward reading, either positive or negative, elementary schools neglect to help them establish a positive reading relationship. By the time these students graduate from elementary school, they have only been turned from being illiterate, beginning readers into aliterate readers. The term aliteracy has been used to describe those students who have acquired the skill to read but choose not to (Merga, 2016) or who read only what they must but no more (Gorman, 2003). An alternative definition for aliteracy is “an aversion to reading among weak readers” (Ramsay, 2002, p. 53), which stresses that aliteracy is not a conscious choice that a child makes but is rather a choice that they adopt as a defense mechanism.

With a reading program created for their school, the educators at Smith Academy will be able to address such areas as choice of texts, access to books, self-efficacy, time to read, volume of reading, reading motivation, and pleasurable reading with all of their students, particularly those most likely to become aliterate. As a result, educators at Smith Academy will be able to empower all of their students to become literate readers.

The rest of this chapter includes a background of the aliteracy problem from an historical, social, and theoretical context, as well as the problem and purpose statement, significance of the study, research questions, definitions used in the study, and a brief summary.

## Background

Aliteracy in the United States is a growing problem that has been compounded by both increased standardized testing (Kohn, 1993) and the rise of technology, and it has long-term effects on the achievement of students (Merga, 2016; Wainer et al., 2008). The teaching of reading has passed through various phases, including a focus on basal readers, phonics, whole-word reading, whole-language, and scientifically-based reading research or SBRR (Temple, Ogle, Crawford, Freppon, & Temple, 2018), and though educators have been able to teach children how to read, they have had less success in getting children to want to read. Building such intrinsic motivation to read has been encouraged by several researchers in order to increase children's reading comprehension and desire to read, but it has not been embraced by all educators (Corpus & Wormington, 2014; McGeown, Duncan, Griffiths, & Stothard, 2014; Ryan & Deci, 2000; Wigfield & Tonks, 2004).

When children choose to read, whether it is during independent reading time at school or at home, they improve their reading comprehension, which contributes to their academic success throughout their academic career (Manuel, 2012; Merga, 2016; Peklaj & Pecjak, 2009; Schaffner & Schiefele, 2016; Sullivan & Brown, 2015). Those children who struggle with reading or who are identified as having learning disabilities are primarily impaired in reading (Denton, 2012). Stichter et al. (2009) went so far as to write that “up to 70% of students who currently receive special education under the learning disabilities label may not have been labeled as such if effective reading instruction were in place with a strong emphasis on early intervention among at-risk students” (p. 68).

Solving their reading problems could make a significant difference in the lives of these children. Not only for their academic success, but for a better career outlook, children whose

reading problems could be overcome will enjoy more options throughout their life. Beginning with the historical, social, and theoretical background of aliteracy and reading deficiencies may lead to discovering a solution to the problem of aliteracy.

### **Historical Context**

The history of aliteracy and motivating children to read is a history of cycles. As early as 1937, Labrant wrote about the heated discussion that centered around allowing free reading in English classes, and more recently, the National Reading Panel's (2000) report that they could not find sufficient data to support the use of silent, sustained reading to recommend the practice in class led to consternation among many language arts teachers (Sanden, 2012). However, the National Reading Panel neglected to examine the role that motivation plays in reading, which Park (2011) called "a serious flaw" (p. 356), and there is a growing amount of research that shows that higher amounts of intrinsic reading motivation lead to greater volume of reading, which then leads to a child improving his or her reading comprehension (Allington, 2013; Gallagher, 2009; Logan & Johnston, 2009; Merga, 2016). Cyclically, it follows that the more a student enjoys reading, the more intrinsically motivated the student is to read more (Becker, McElvany, & Kortenbruck, 2010; Park, 2011; Wigfield & Tonks, 2004).

Many interventions have been attempted over the last 50 years, the latest being the Response to Intervention (RTI), which involves using three distinct tiers of interventions to overcome children's reading problems (Denton, 2012). Unfortunately, most reading programs that have been recently promoted have not been supported by evidence; the What Works Clearinghouse (WWC) reviewed 153 different reading programs and found only one, Reading Recovery, that demonstrated strong evidence that it improved reading achievement (as cited in Allington, 2013).

## **Social Context**

Helping children develop a positive relationship with reading should be a major focus of every elementary school, yet far too often elementary schools in the United States make reading decisions that focus on specific literacy skills rather than encouraging the individual students to become life-long readers (Powell, McIntyre, & Rightmyer, 2006; Walp & Walmsley, 2007). Often, this time is spent preparing students for standardized tests rather than encouraging a positive reading relationship (Fletcher, 2018; Manuel, 2012). As a result, the number of children who have not mastered letter naming when they enter school (35%), approximately equals the number of children who score below basic on the NAEP (National Assessment of Educational Progress) at the fourth grade, 33% (Pearson & Hiebert, 2010). Stated a different way, one third of the students who enter kindergarten are illiterate, and one third of the students who enter fourth grade are aliterate. These children are three to four times more likely to drop out of school (National Adult Literacy Survey, 2002). The schools that foster these children for the first four years of schooling have succeeded only in turning illiterate readers into aliterate readers, children who are reading several grades below their grade level and are uninterested in reading. To understand this requires examining what happens to children when they first arrive in kindergarten.

A third of the children entering kindergarten have very little exposure to reading. Unfortunately for them, early exposure to storybooks has a clear relationship to later reading success (Mol & Bus, 2011; Senechal & LeFevre, 2002; Tadesse & Washington, 2013), and the children who arrive having been read to by their parents, caregivers, or pre-K programs such as Head Start have a distinct advantage over those with little reading experience (National Adult Literacy Survey, 2002; Sparks, Patton, & Murdoch, 2013). This distinct advantage reveals itself



quickly to everyone in the classroom as most of the children are already able to read the letters of the alphabet hanging on the wall and some can even read the books that are spread out on the tables. But for one third of the students, this ability that their classmates have already acquired only serves to set them apart. Unfortunately, no one explains to them that with practice they can read just as well as the majority of their classmates who can already recite their ABCs, but the fact that their peers do know their ABCs is a good indicator that they will become fluent readers (Foulin, 2005). Likewise, no one explains to these children that the other students' caregivers had the time and interest to read with them, unlike their own caregivers, who report reading less than seven minutes per day (Dynea & Justice, 2015). As the children are only 5 years old, it is doubtful that they take into consideration their unlucky circumstances prior to school and realize that the other children were more fortunate when they received their crucial early start in learning to read (Sparks et al., 2013). Nor do they consider the vast differences that have occurred in their lives as compared to the lives of the children already reading all around them, which plays an important part in their eventual literacy success (Allington & Walmsley, 2007), and infer that they, too, could become avid readers. Instead, without the early family engagement that has a lasting educational impact (Tadesse & Washington, 2013), they may think that their reading peers are simply smarter than they are, and that there is some secret to reading that they are not privy to. Thus, they turn to other pursuits at which they are more successful.

In too many schools, these underperforming students are quickly labeled at-risk or struggling or reluctant and placed in remedial interventions with scripted material to overcome their deficiencies (Manuel, 2012). Reading then quickly becomes a chore or a requirement and is not associated with any pleasure whatsoever (Alexander & Jarman, 2018), which then leads to aliteracy. These children have not been taught by their parents that reading can be a pleasurable

experience, and the school has made reading an unpleasurable experience, and so they choose other options on which spend their time that do give them pleasure. Though they eventually learn to read, they rarely enjoy it or are very good at it; by the end of the third grade, when many state tests have begun, their beliefs about their own poor reading abilities are confirmed (Peklaj & Pecjak, 2009; Sanacore & Palumbo, 2008), and their academic future is limited by their poor reading skills.

In order to develop students' intrinsic motivation to read, schools should identify their students' motivation and then take steps to foster that intrinsic motivation (Powell et al., 2006). First, schools must create the same experiences for their struggling readers that their proficient readers had during the preschool years of their lives. Schools must make reading an enjoyable experience (Mol & Bus, 2011). Just as parents and caretakers introduced books to their children by reading with them in a safe environment, so must schools introduce books to their struggling readers. The best way to engage these beginning, but older, children is to offer them more choice of texts so that they become engaged with their reading and want to read more as well as provide the time during school to read (McGill-Franzen, Ward, & Cahill, 2016; Morgan & Wagner, 2013). The more students read, the better their comprehension becomes (Fisher & Frey, 2018; Park, 2011); the more intrinsically motivated they are to continue reading, the more reading they do (Gallagher, 2009; Moss & Young, 2010; Wigfield & Tonks, 2004). And the cycle continues.

### **Theoretical Context**

Reading motivation has been extensively studied (Corpus & Wormington, 2014; Guthrie, Wigfield, & VonSecker, 2000; Logan & Medford, 2011; McGeown et al., 2014; McKenna, Conradi, Lawrence, Jang, & Meyer, 2012; Park 2011; Ryan & Deci, 2000; Schiefele & Löweke,

2017) and has been greatly influenced by the Self-Determination Theory (SDT) of Ryan and Deci (2000; Deci & Ryan, 2008) as well as the Expectancy-Value Theory (Eccles, 1983, 2009; Wigfield & Eccles, 2000). Aliteracy, or a lack of reading motivation, may be explained by students' perceptions of themselves as poor readers or by their belief that reading is not a valuable use of their time.

### **Problem Statement**

Too many children in elementary schools leave the fifth grade as aliterate readers. When they first arrive in school with no literacy skills, they are often placed in a remedial reading program with very limited choice in what they read, which, ironically, may help them learn to read better but does not encourage them to *want* to read. Because they are never taught to enjoy reading by their family or their teachers, they become and often remain aliterate readers for the rest of their lives. There is much research that supports how critical early reading intervention is, and it is crucial that elementary schools identify early, struggling readers before they have turned from being illiterate readers into aliterate readers (Cartwright, Marshall, & Wray, 2015; Cunningham & Stanovich, 1998; Deasley, Evans, Nowak, & Willoughby, 2018; Pearson & Hiebert, 2010; Sparks et al., 2013; Tadesse & Washington, 2013; Wolf, 2007).

The problem is that too many upper elementary children become aliterate readers. For those children who arrive at school with little or no relationship to reading, elementary schools may neglect to establish a positive reading relationship; thus, by the time the students finish elementary school, they have only been turned from being beginning, illiterate readers into aliterate readers.

### **Purpose Statement**

The purpose of this applied study was to solve the problem of aliteracy for upper elementary students at Smith Academy in central Georgia and to formulate a solution to further address the problem. A multimethod design using both qualitative and quantitative approaches was used. The first approach was structured interviews with upper elementary students. The second approach was a focus group of the teachers of the upper elementary students. The third approach was a survey of upper elementary students.

### **Significance of the Study**

Aliteracy is a growing problem in the U.S. and worldwide. Addressing this problem at Smith Academy may lead to better approaches to helping all of its students to become literate readers. Further, if the solution helps address the aliteracy problem at Smith Academy, it also may be applicable at other, similar elementary schools. The benefits of reading well are multifaceted, including higher cognitive progress (Sullivan & Brown, 2015), improved performance across the entire curriculum (Peklaj & Pecjak, 2009) as well as being relevant to cultural and social participation in society and occupational success (Schaffner & Schiefele, 2016). At the present time, what schools are doing to solve the problem is not working for one third of their students. By researching the problem at the upper elementary level, this study may help reduce the number of aliterate readers both in elementary schools and in middle and high schools as well. Finding ways to increase students' intrinsic reading motivation and raising children's reading interest may lead to children reading more, which then may lead to improved reading comprehension (Allington, 2013; Gallagher, 2009; Garan & DeVogd, 2008; Moss & Young, 2010; Sanden, 2012). By demonstrating that aliterate children may be turned into literate readers at one specific elementary school, this study may demonstrate that elementary schools across the

U.S. can increase their students' academic success by changing their reading approach and emphasizing that reading is an enjoyable activity.

The significance of this study is that raising children's reading interest may lead to children reading more, which then may lead to improved reading comprehension (Allington, 2013; Gallagher, 2009; Garan & DeVogd, 2008; Moss & Young, 2010; Sanden, 2012). By demonstrating that aliterate children may be turned into literate readers, this study may help Smith Academy first and then elementary schools across the U.S. to improve their students' academic success by modifying their reading approach and emphasizing that reading can be an enjoyable activity.

Currently, the research continues to grow that says that the more a person is intrinsically motivated to practice a skill, the better at the skill the person becomes (Corpus & Wormington, 2014; Ryan & Deci, 2000). This is true whether a person is old or young, rich or poor, playing basketball or reading. For educators, it is especially important to acknowledge that the best way to improve a child's reading ability is to encourage the child's intrinsic desire to read more (Allington, 1983; Manuel, 2012; Pearson, 2005).

### **Research Questions**

The following questions were addressed in this study.

**Central Question:** How can the problem of aliteracy be solved at Smith Academy, located in central Georgia?

**Sub-question 1:** How would students in an interview solve the problem of aliteracy at Smith Academy located in central Georgia?

**Sub-question 2:** How would quantitative survey data inform the problem of aliteracy at Smith Academy located in central Georgia?

**Sub-question 3:** How would teachers in a focus group solve the problem of aliteracy at Smith Academy located in central Georgia?

### Definitions

1. *Aliterate* – a person who has acquired the skill to read but chooses not to (Merga, 2016) or a person who reads only what he or she must but no more (Gorman, 2003).
2. *Aliteracy* – lack of the reading habit; especially, such a lack in capable readers who choose not to read (Ramsay, 2002) or an aversion to reading among weak readers (Ramsay, 2002).
3. *Engagement* – behavioral displays of effort, time, and persistence in attaining desired outcomes (Klauda & Guthrie, 2015).
4. *Functional literacy* – the ability to read and write at a level that will enable a person to live a normal exterior life (though they are likely to have a shrunken interior life; Gorman, 2003).
5. *Goal* – an individual's orientation and intentions toward reading; the primary reason(s) an individual reads (Jang, Conradi, McKenna, & Jones, 2015).
6. *Interest* – a positive orientation toward reading about a particular topic (Jang et al., 2015).
7. *Intrinsic motivation* – engaging in a task for no obvious reward except for the activity itself; the activity is the means and the end (Schunk, 2016).
8. *Reading attitude* – a set of acquired feelings or disposition, either positive or negative, toward the activity of reading (Jang et al., 2015).
9. *Reading literacy* – fluency, vocabulary knowledge, and text comprehension (Becker et al., 2010).

10. *Reading motivation* – the individual’s personal goals, values, and beliefs with regard to the topics, processes, and outcomes of reading (Guthrie et al., 2000)
11. *Self-Concept* – an individual’s overall self-perception as a reader, including his or her sense of competence and the role ascribed to reading as a part of his or her personal identity (Jang et al., 2015).
12. *Self-Efficacy* – an individual’s judgment of his or her ability to accomplish a specific reading task (Jang et al., 2015).
13. *Sustained silent reading* – a daily established period of time during the school day when all students and their teachers read silently (Manning, Lewis, & Lewis, 2010).
14. *Value* – an individual’s beliefs about the extent to which reading is generally useful, enjoyable, or otherwise important (Jang et al., 2015).

### **Summary**

Elementary school teachers are faced with the task of first ensuring that their students are capable of reading and second, and more importantly, that their students are readers (Gallagher, 2009), no matter the level of exposure the children have had to reading before they first walked into the school. Children who have little experience with reading or who struggle with reading can quickly become aliterate if they do not receive positive encouragement. Therefore, it is critical that children be taught that there is pleasure to be obtained from reading, and this may be accomplished by focusing on various strategies to increase their intrinsic reading motivation. The more children read, the more accomplished readers they will become. This study aimed to increase the knowledge about how to solve the elementary aliteracy problem.

## CHAPTER TWO: LITERATURE REVIEW

### Overview

Aliteracy, which may either describe a lack of the reading habit (especially a lack in capable readers who choose not to read) or an aversion to reading among weak readers (Ramsay, 2002), is a growing problem among America's elementary students, and elementary teachers and administrators struggle with solving the issue (Scholastic, 2010; Sparks et al., 2013). As many as 60% of reluctant readers avoid reading because reading is a threat to them (Nielen, Mol, Sikkema-de Jong, & Bus, 2016). There are many factors that lead to students becoming aliterate readers, such as poor pre-school reading experiences and a lack of access to books, but the interventions that many schools are using for their most reluctant readers are often not working. Gallagher (2009) wrote that the interventions "rather than helping students, many of the reading practices found in today's classrooms are actually contributing to the death of reading" (p. 2). Solving the aliteracy problem may lead to a significantly improved future for the students who are least likely to succeed without an appropriate intervention to improve their reading attitude.

Helping children develop a positive relationship with reading should be a major focus of every elementary schoolteacher, yet far too often elementary school administrators and teachers, particularly in economically-disadvantaged areas, make reading decisions that benefit themselves by focusing on higher test scores (Gallagher, 2009; Kohn, 1993) rather than the individual students in the form of life-long reading interest. Again, the number of children who have not mastered letter naming when they enter school (35%) is approximately the same as the number of children who score below basic on the NAEP (National Assessment of Educational Progress) at the fourth grade, 33% (Pearson & Hiebert, 2010). These statistics suggest that for these children, the instruction and interventions that the school attempted did not work; in essence, the



educators who taught these children succeeded only in turning these illiterate readers into aliterate readers. These students are capable of basic reading and decoding letters and words but choose not to read because they have not been taught to enjoy reading. Thomas and Moorman (1983) portrayed the aliteracy problem facing America's schools over 30 years ago when they wrote, "The student who can read but chooses not to is probably the most crucial concern confronting our educational institutions today. It is not illiteracy we are combating, but aliteracy" (p. 137). Schools do a good job of teaching children the basics of reading, but their main challenge is getting their students beyond that point. As Krashen (2004) wrote, "The problem is thus not how to bring students to the second or third grade reading level; the problem is how to bring them beyond this" (p. x). Understanding aliteracy requires examining what happens to children before they arrive at kindergarten as well as what happens to them during their first few years of elementary school. The rest of this chapter includes the theoretical background for the study as well as the related literature.

### **Theoretical Framework**

There are two theories that apply to the topic of aliteracy and the factors that both cause and sustain it. The self-determination theory (SDT) concerns intrinsic motivation and can help explain why some students become readers and why others do not. The expectancy-value theory helps explain why some students persevere with their reading while others may give up or avoid reading altogether.

#### **Self-Determination Theory**

The first theory, the SDT of Ryan and Deci (2000; Deci & Ryan, 2008), emphasizes the distinction between intrinsic and extrinsic motivation and can help explain why students choose to read and how to promote reading among aliterate elementary students. Working with fifth

graders, the researchers distinguished between motivations depending on the reasons or goals that impelled the action (Ryan & Deci, 2000). They wrote that students “must not only experience competence or efficacy, they must also experience their behavior as self-determined for intrinsic motivation to be in evidence” (Ryan & Deci, 2000, p. 70). Intrinsic motivation and the power to choose, they concluded, are a much more powerful force to impel students to read than extrinsic motivation.

It is to an educator’s advantage to understand that there are different types of motivation and that although intrinsic motivation is a more powerful tool, if a teacher can find different ways to motivate the students, including extrinsic motivation when there is already intrinsic motivation present (Park, 2011), then more students will ultimately be successful with their reading comprehension (Fraumeni-McBride, 2017). Teachers can help activate motivational processes, thus encouraging and guiding their students to more reading literacy (Levesque, Copeland, & Sutcliffe, 2008). One such way to motivate aliterate students is to allow them more choice of the texts that they read (Allington, 2013; Morgan & Wagner, 2013). This may especially be true for boys (Fisher & Frey, 2012; McKenna et al., 2012), who generally read less than girls and report that they like reading less than girls (Logan & Medford, 2011; Malloy et al., 2017) and even more true for African American boys “who struggle with reading [and] are encountering texts that are characteristically disabling” (Tatum, 2008, p. 46).

### **Expectancy-Value Theory**

The other theory that helps explain students’ reading abilities is the expectancy-value theory (Eccles, 1983, 2009; Wigfield & Eccles, 2000), which states that the achievement and choices that students make are guided by two factors: their expectancy of success and how much they value the task. Thus, if students are confident that they can complete a task, they are more

likely to persevere at it (Eccles, 2009). Likewise, if the task is something that the students value, then they will try their hardest to accomplish it (Wigfield & Eccles, 2000). If students are struggling readers, then they are less likely to want to read because they do not believe that they will be successful, particularly if the reading assignment is one that does not interest them and has little value to them. However, if the teacher allows the students to select their own reading material, they will more likely value the reading and persevere through intrinsic motivation to finish the reading (Ryan & Deci, 2000; McGill-Franzen et al., 2016; Sanden, 2012).

### **Related Literature**

The various strategies to solve aliteracy by attempting to improve children's reading attitudes and abilities have been discussed in many different studies in several different areas. These include studies that examine the experiences that students have prior to entering school as well as those that relate to motivation, both intrinsic and extrinsic, plus studies that reference self-efficacy, volume of reading, offering time to read, access to books, offering more choice of texts, independent reading, and increasing pleasurable reading experiences. However, studies that specifically address aliteracy and solving it are relatively rare.

### **Early Childhood Reading Experiences**

Perhaps no factor more affects children's reading attitude throughout their lifetime than their reading experiences before entering school. Wolf (2007) wrote that even before kindergarten there is a gap of 32 million words separating children who have grown up in linguistically-stimulating homes compared to children raised in linguistically-impooverished homes. The bulk of vocabulary growth occurs through language exposure (Moss & Young, 2010), so the more a child hears a parent talk or watches a parent read, the more literacy stimulation the child will receive (Sullivan & Brown, 2013). Several studies support the

assertion that when children are read to at home, they read more on their own (Lomax, 1976; Neuman, 1986, 1995). In a study of over 20,000 children, Denton and West (2002) reported that children who were read to at least three times a week prior to entering kindergarten performed better on a measure of reading than did those children who were read to fewer than three times a week. By comparison, in Lao's (2003) study, only one of the 12 reluctant readers was read to as a child, thus supporting the idea that literacy experiences prior to entering school can play either a positive or a negative role in later literacy development. In fact, children read more when they see other people reading, both at school and in the home (Krashen, 2004). For many children, however, witnessing others read is simply not the case.

A third of the children entering kindergarten have little exposure to reading.

Unfortunately, exposure to storybooks before entering school has a clear correlation to later reading success (Mol & Bus, 2011; Senechal & LeFevre, 2002; Tadesse & Washington, 2013), and the children who arrive having been read to by their parents, caregivers, or in a quality pre-K program have a distinct advantage over those with little reading experience (National Adult Literacy Survey, 2002; Sparks et al., 2013). The vast majority of children enjoy being read to (Mason & Blanton, 1971; Senechal, LeFevre, Hudson, & Lawson, 1996; Walker & Kuerbitz, 1979), yet many early childhood teachers do not believe that language and literacy experiences are very important in preschool (Dynia & Justice, 2015). For the students who do have this advantage, it reveals itself quickly as most of the children in the classroom are already able to read the letters of the alphabet hanging on the wall and some can even read the books that are spread out on the tables. But for one third of the students, their lack of reading ability only serves to set them apart (Allington, 1995; Vaknin-Nusbaum, Nevo, Brande, & Gambrell, 2018). It is not explained to them that the fact that their peers do know their ABCs is a good indicator

that they will become fluent readers (Foulin, 2005). And it is this lack of school readiness that Davoudzadeh, McTernan, and Grimm (2015) explained puts these children most at risk for being held back during elementary school.

As early as first grade, children become aware of which reading groups they are assigned to and what that implies about their capabilities (Cartwright et al., 2016; Wigfield & Tonks, 2004), but as they are only 5 or 6 years old, it is doubtful that they take into consideration their own circumstances prior to school and realize that the other children were more fortunate than they in their upbringing. Gambrell (Moss & Young, 2010) described the children as being either lucky or unlucky in their reading experiences prior to school and as a result, the students with little reading exposure may think that their reading peers are simply smarter than they are or that there is some secret to reading that they are not privy to. In an interview with Moss and Young (2010), Gambrell asked the question, “How do we make up that gap between the ‘lucky’ students who have had those experiences, and the ‘unlucky’ students who haven’t been raised in an environment where there was an adult who has nurtured their literacy development?” (p. 89). In many cases, these unlucky children turn away from reading and toward other pursuits at which they are more successful, never becoming truly literate the rest of their lives.

These underperforming students are quickly labeled at-risk, struggling, or reluctant readers and placed in remedial interventions with scripted material in an attempt to overcome their deficiencies (Cope, 1997; Manuel, 2012). Often, this is so the school administrators can raise the school’s own test scores (Gallagher, 2009). These underperforming students witness their peers being sorted into other reading groups that, unknown to them, are based more on exposure to print than any reading talent, which may lead to more reading failure (Allington & Walmsley, 2007; Vaknin-Nusbaum et al., 2018), and reading then becomes a chore or a

requirement and is not associated with any pleasure whatsoever (Alexander & Jarman, 2018). This may ultimately lead to aliteracy. Children's experiences with books in the first grade are directly correlated with their successful reading in the third grade (Senechal & Lefevre, 2002). The children who have not been taught by the third grade that reading can be a pleasurable experience choose other options in their lives of ways to spend their time that do give them pleasure. Though they eventually learn to read, they rarely enjoy it or are very good at it; by the end of the third grade, when many state tests have begun, their beliefs about their own poor reading abilities are confirmed (Peklaj & Pecjak, 2009; Sanacore & Palumbo, 2008), and their limited reading skills also limit their academic future.

Studies by Foulin (2005), Pearson and Hiebert (2010), and Sparks et al. (2013) show that it is the support or lack of support that children receive before school that makes a significant difference in their reading interest and ability. Primary caregivers who read to their preschool children provide a significant advantage (Mol & Bus, 2011; Senechal & LeFevre, 2002; Tadesse & Washington, 2013). In general, it is economically-disadvantaged children who are more likely to receive the least support and the most likely to become poor or aliterate readers (Allington & Walmsley, 2007; Wolf, 2007). This lack of reading support at home leads to students struggling to read when they enter school. Some pre-kindergarten programs help make up the difference, but for many students these programs are either unavailable or of poor quality. Dynia and Justice (2015) reported that many preschool teachers do not believe that language and literacy experiences are very important, but the researchers recommended that preschool teachers "should conduct three read alouds per day for about 45 minutes in total" (p. 234). For the children who are unable to attend preschool or attend low-quality preschools, elementary school

teachers must be prepared to nurture their reading interest the moment the students enter the elementary classroom.

In order to encourage the development of intrinsic motivation to read for these struggling students, schools should employ a cycle of strategies. As early as possible, educators should make reading a safe and comfortable experience (Temple et al., 2018), mimicking the successful situation that most children have at home with their parents or caretakers before they ever entered a school. Schools should provide students the time to read during the school day (Taylor, Frye, & Maruyama, 1990) and offer students more choice of texts (Sanden, 2012) so that they become engaged with their reading and want to read more. The more and earlier that students read, particularly books intended for children, the better their comprehension becomes, the more intrinsically motivated they are to continue reading (Schiefele, Stutz, & Schaffner, 2016), and the cycle continues.

Those children who are raised in non-literacy environments soon look to other pursuits and interests rather than reading, such as television or other electronics. According to Rideout, Foehr, and Roberts (2010), students between the ages of 8 and 18 spend an average of seven hours and 38 minutes a day using entertainment media, including the Internet. Yet the benefits of television and the Internet are questionable, particularly when compared to reading. Gallagher (2009) wrote that “Internet reading produces shallower reading than book reading. When reading the Internet materials, there is more emphasis on reading headlines and blurbs. Deeper reading is less likely to occur” (p. 112). And as early as 1973, Fasic reported that the language in children’s books was significantly more complicated than the language in children’s television shows. Cunningham and Stanovich (1998) found that even educational television, such as Mr. Rogers and Sesame Street, only have two rare words per 1000, whereas children’s books provide

nearly 31 rare words per 1000 and preschool books over 16 rare words per 1000. And, the authors continued, children's books have 50% more rare words than either adult prime-time television or the conversation of college graduates (Cunningham & Stanovich, 1998). According to Krashen (2004), television language is not nearly as complex as book language. In their defense, some children's television shows help children learn the basics of reading, but they do not encourage children to read more; they unfortunately encourage children to watch more television. Television and other electronics have often been linked to decreased amounts of reading (Gallagher, 2009; Merga, 2016) as well as lower reading comprehension (Deasley et al., 2018; Delgado, Vargas, Ackerman, & Salmerón, 2018; Lenhard, Schroeders, & Lenhard, 2017; Loh & Kanai, 2015; Mangen, Walgermo, & Brønck, 2013; Merga, 2016; Sikora, Evans, & Kelley, 2018; Singer & Alexander, 2017). These electronics also cannot replace the social aspect that a child often finds when reading with a parent or caregiver.

The pleasurable act of a parent or caregiver reading with a pre-school (or any) child is usually a comfortable, social activity that the child learns to associate with reading (Gambrell, 2010). Ensuring that the act of reading itself is enjoyable is a crucial step toward literacy (Levy, Hall, & Preece, 2018). Parents do not necessarily emphasize phonics or fluency or spelling during such an encounter. However, the habitual act of a parent reading with his or her child is one of the best predictors of later reading success (Allington & Walmsley, 2007; Wolf, 2007).

The importance of these early positive reading experiences cannot be overstated (Cunningham & Stanovich, 1998) if a child is to learn that reading is an activity to value in and of itself and become intrinsically motivated. Once children have entered schools, the schools should continue emphasizing that families are a large part of any literacy program that the school has to help ensure that students either become or continue to be successful readers (Tabors,



Snow, & Dickinson, 2001; Wasik, 2004). Schools should emphasize the role that pleasure or motivation plays when they attempt to teach children to read, particularly those who did not receive pre-school literacy encouragement to read (Schiefele et al., 2016; Vaknin-Nusbaum et al., 2018; Wilhelm, 2016).

### **Developing Intrinsic and Extrinsic Motivation for Struggling Readers**

Motivating children who are already struggling with their reading at an early age is a challenging and complex problem for elementary schools as it becomes not only more difficult to motivate students as they progress through school (Wanzek, Wexler, Vaughn, & Ciullo, 2013) but also more expensive (Dyer & Binkney, 2007). Once struggling elementary readers discover that they are behind their classmates, catching up becomes increasingly more challenging (Chapman & Tunmer, 1997). Nevertheless, this should be one of a teacher's and school's primary goals: to get the students reading on grade-level. Finding the right motivation is imperative if they are to succeed.

**Intrinsic reading motivation.** Multiple researchers have shown that intrinsic reading motivation is positively correlated with reading ability (Becker et al., 2010; Corpus & Wormington, 2014; Miyamoto, Pfof, & Artelt, 2018; Park, 2011; Troyer, Kim, Hale, Wantchekon, & Armstrong, 2018; Wigfield & Tonks, 2004) and that developing intrinsic motivation in their students is a pivotal role for teachers (Garces-Bacsal, Tupas, Kaur, Paculdar, & Baja, 2018). Such a relationship has been demonstrated from elementary school through high school (Fletcher, 2018; Miyamoto et al., 2018; Walgermo, Foldnes, Uppstad, & Solheim, 2018), and Levesque et al. (2008) suggested that if a behavior such as reading could be made into a habit through repetition, then the behavior could become self-determined and an intrinsic behavior.

Teachers can greatly influence this transformation by making reading a routine part of every class period. As intrinsic motivation is steadily associated with better achievement in all areas (Guay, Ratelle, & Chanal, 2008; Ryan & Deci, 2000), all educators should strive to discover ways to improve it, again, particularly for students who arrive at school with little relationship to reading. Educators need to encourage intrinsic reading motivation especially for boys, who, Logan and Medford (2011) wrote, may benefit specifically from intrinsic motivators, and Gilbert and Gilbert (1998) noted that “addressing the literacy needs of boys ha[s] not gone far enough because they have not taken sufficient account of the gendered construction of boys” (p. 200).

The opposite, of course, is true as well. When teachers are overly controlling and do not allow children choice, intrinsic motivation can be stifled (Wigfield & Tonks, 2004). Effective teachers allow students more choice and as the reading volume is increased due to intrinsic motivation, so the reading comprehension improves (Logan & Johnston, 2009; Merga, 2016; Park, 2011; Powell et al., 2006). If children are motivated to read, then the teacher’s work is halfway completed. Swan, Coddington, and Guthrie (2010) wrote that “when students are motivated to engage in silent reading for intrinsic reasons (e.g., enjoyment, involvement, curiosity, challenge) as opposed to extrinsic reasons (e.g., grades, rewards, competition), their reading comprehension increases” (p. 96).

**Extrinsic reading motivation.** Although there is research that shows that extrinsic motivation can negatively affect students’ reading abilities (Becker et al., 2010; Lemos & Verissimo, 2013; Park, 2011; Ryan & Deci, 2000; Schaffner, Schiefele, & Ulferts, 2013; Schiefele & Löweke, 2017; Smith, 1988) and Krashen (2004) wrote that “research offers no support for the use of rewards and suggests . . . that rewards may be harmful” (p. 117), there is

also evidence to support the idea that extrinsic motivation can raise a student's reading volume, but only if the student's intrinsic motivation to read is already high (McGeown, Norgate, & Warhurst, 2012; Park, 2011). Although Ryan and Deci (2000) wrote that some extrinsic motivators have the potential to convince students to understand and accept the usefulness of reading well, using extrinsic motivators is unlikely to succeed with 5- or 6-year-old children when they are first learning to read.

Teachers must be aware of extrinsic motivators that are more active and volitional rather than passive and controlling and should allow students more choice (Ryan & Deci, 2000). Strategies for teachers to motivate young readers vary, but it is important that students identify their teachers as actually enjoying reading for them to be role models (Merga, 2016). The creation of reading groups in a school, which may be termed an extrinsic motivator, can also positively increase student motivation to read (De Naeghel & Van Keer, 2013).

As students grow past elementary school, maintaining either intrinsic or extrinsic motivation grows increasingly more difficult, particularly as assignments may also grow increasingly less relevant to the students (Corpus & Wormington, 2014; Ryan & Deci, 2000; Schiefele & Löweke, 2017). During this maturation period, students are also less likely to value such extrinsic motivators as pleasing the teacher or earning a higher grade (Lemos & Verissimo, 2013) and will also react negatively to extrinsic motivators such as deadlines, pressured evaluations, and imposed goals (Ryan & Deci, 2000). Gneezy, Meier, and Rey-Biel (2011) explained that extrinsic incentives may succeed over a short period of time, but they ultimately weaken intrinsic motivation. Such a program as Accelerated Reader (AR), which many elementary schools use to encourage their students to read more, has no real evidence supporting it as well as no real evidence that the additional tests add any significant boost to reading

motivation or comprehension (Krashen, 2004). Chenowith (2001) found that despite the reading that students do during the AR program, their reading dropped to lower levels than other students who did not participate in AR within one month of exiting the AR program. In studies by Pavonetti, Brimmer, and Ciplewski (2002/2003), the researchers discovered that after students exited the AR program, they read an average of ten hours less each week than did students who were not involved in the AR program. As Gallagher (2009) explained, “Programs such as AR and others that offer extrinsic rewards often lead to demotivating students after they have left the classroom” (p. 75). The students’ extrinsic motivation had disappeared, and so they were less interested in reading. Ramos and Krashen (1998) cautioned that “extrinsic incentives for reading have not been successful, while improving access to books has been successful in encouraging reading” (p. 614). If teachers in the early elementary grades can use both intrinsic and extrinsic motivators to help foster an enjoyment of reading and a reading habit, then as the students mature and extrinsic motivators are less successful they may still avoid aliteracy (Schiefele & Löweke, 2017).

A major extrinsic factor that is affecting reading is the amount of testing that occurs throughout all the grades of schools. Lemos and Verissimo (2013) explained that the further along children progress in elementary school, the more debilitating role extrinsic motivators play on their achievement. As Rasinski and Fawcett (2008) acknowledged, “Nearly every state test now includes extended reading passages, regardless of the subject area” (p. 2), which adds extrinsic pressure on students to become better readers.

### **Self-Efficacy**

Peklaj and Pecjak (2009) believed that self-efficacy, the belief that a person has that he or she can accomplish an activity prior to attempting it, is the most important motivational factor

regarding a student's reading ability and by the third grade reading self-efficacy fundamentally influences a student's reading competence. Swan et al. (2010) wrote that "overall, student self-efficacy for reading was the strongest predictor of reading ability as measured by both the standardized test of comprehension and reading/language arts grades" (p. 98). Others concurred and say that reading efficacy is closely associated with reading skill (Chapman & Tunmer, 1995, 1997; Coddington, 2009; Guthrie, Coddington, & Wigfield, 2009; McGeown et al., 2012; Retelsdorf, Köller, & Möller, 2011). Once students do well on an activity, such as reading, they then begin developing a positive sense of efficacy towards that activity (Wigfield & Tonks, 2004). The authors continued by saying that even seeing a peer do an activity, such as reading, can be reinforcing (Wigfield & Tonks, 2004). Quirk, Schwanenflugel, and Webb (2009) agreed and suggested that students who consider themselves to be good readers may choose to read more, which promotes a future cycle of greater comprehension and fluency.

However, as early as first grade, students are well aware of the reading group they are assigned to and what that implies about their abilities (Cartwright et al., 2016; Wigfield & Tonks, 2004). Watching peers read while they are unable to can be a significant blow to students' self-efficacy unless a teacher intervenes quickly. If a teacher assigns a task without considering whether it promotes a child's motivation to read, then the child's literacy development and self-efficacy may be hindered (Powell et al., 2006).

Unfortunately, too often teachers choose or are forced to use inappropriate or too difficult texts, which distance children even further from reading enjoyment (Manuel, 2012) and make them even less confident. Chapman and Tunmer (1997) wrote that once a child has entered most remedial situations, it is difficult for them to climb back out. Dynia and Justice (2015) reported that some early childhood special education teachers read for less than seven minutes a day with

their students, while Rasinski and Fawcett (2008) wrote that “as few as 16 words were read in a week by children in a low-reading group compared to 1,933 words for children in a high-reading group” (p. 5). With such low expectations, it is difficult for students to regain their reading confidence.

In a 2001 paper, Lyon and colleagues wrote that as many as 70% of students in special education with learning disabilities may not have been labeled if they had received effective reading instruction early in their schooling. Using a variety of strategies to encourage students’ reading confidence may lead to a child having success with a book and having an enjoyable experience, which then may improve the child’s belief that he or she is capable of reading well and help prevent aliteracy.

### **Volume**

There is substantial evidence that by increasing the volume of reading that a child does, there is also an increase in reading ability (Allington, 2013; Allington & Walmsley, 2007; Fisher & Frey, 2018; Gallagher, 2009; Jang et al., 2015; Sanden, 2012; Sparks et al., 2013; Wigfield & Tonks, 2004). This volume, sometimes called print exposure, is often what separates children when they first enter school and greatly affects whether those children become aliterate or literate (Wolf, 2007).

Common sense would say that the more a person practices any skill, the better he or she will become at the skill, and this is true for reading. Mol and Bus (2011) wrote that reading volume is associated with better oral language skills, spelling, reading comprehension, and general knowledge. Other studies concurred by saying that the time spent reading is clearly associated with higher comprehension and achievement (Cunningham & Stanovich, 1998; Samuels & Wu, 2001), and the National Reading Panel (2000) concluded that vocabulary

knowledge is developed implicitly through wide reading. Krashen (2004) added that “more reading results in better reading comprehension, writing style, vocabulary, spelling, and grammatical development” (p. 17), and Kuhn (2005) wrote that expanding the volume of independent reading for poor readers fosters fluency, comprehension, and vocabulary growth. If schools are truly interested in raising their test scores, then the amount of reading that students do should be increased, as Anderson, Wilson, and Fielding (1998) found in a study of fifth graders that demonstrated a strong correlation between the time they spent reading and their performance on standardized reading tests. Coddington (2009) agreed and said that “amount of reading, as measured by student self-reports of reading activities such as textbooks, workbooks, class notes, websites, handouts, and whiteboard and overhead readings was significantly associated with reading achievement” (p. 98), while Pearson (2005) added, “All the explicit instruction in the world will not make strong readers unless accompanied by lots of experience applying their knowledge, skills, and strategies during actual reading” (p. 6).

Again, when children entering kindergarten do not know their letters and are surrounded by their peers who clearly know both their letters and many words and even sentences, they may quickly become overwhelmed by the disparate abilities and believe that they will never catch up. As they turn away from reading and read less, their chances of becoming illiterate increase. Struggling readers avoid reading and do far less reading than good readers (Allington, 2013), which agrees with Ramsay’s (2002) definition of illiteracy. Providing opportunities for them to increase the amount of reading that they do is a vital step in improving students’ reading comprehension (Sparks et al., 2013), yet according to Allington and McGill-Franzen (2010), “the amount of words some poor readers read during their lessons was as low as 19 words per day” (p. 51). Teachers need to give all of their students success with reading in order to increase the

amount of reading that students do, no matter the ability level that they begin from. As Swan et al. (2010) wrote, “To change low readers into high readers, the amount of time spent reading must increase” (p. 100). As Hairrell, Edmonds, Vaughn, and Simmons (2010) wrote, “The more one reads, the more one learns and wants to read and learn. If practice makes perfect, then more time reading should lead to improved reading achievement” (p. 276). Gallagher (2009) summed up the situation when he wrote, “Students are not doing enough reading in school” (p. 29). One important factor in increasing the volume that children, including those of low socioeconomic status, read is to ensure that they have access to books that they want to read (Fisher & Frey, 2018; White & Kim, 2010).

### **Access**

One of the earliest predictors of later reading fluency is the number of books in a child’s home and the amount of access that a child has to books. More than 40 years ago, Heyns (1978) wrote that increasing low socioeconomic (SES) students’ access to books would go a long way toward reducing gaps in learning, and White and Kim (2010) wrote that “low-SES students make less progress in reading in the summer months than high-SES students because, among other factors, they have less access to books” (p. 72). Several other studies simply support that children read more when books are accessible in their homes, schools, and classrooms (Chambliss & McKillop, 2000; Neuman & Celano, 2001). Being surrounded by books in the home at an early age positively influences a child’s academic future (Fletcher, 2018; Sikora et al., 2018; Sullivan & Brown, 2013) and is one of the greatest advantages of wealth.

While some children grow up surrounded by books and other texts, other children have substantially less access to reading materials (Neuman & Celano, 2001). Not only do disadvantaged children arrive at school with fewer resources and at greater risk of becoming



aliterate readers, but every summer that they do not have books is a further reduction in literary opportunities. Allington (2013) demonstrated that summer loss can be eliminated by providing 12 free self-selected books each summer to low-income children, validating that if given access to books of interest, children will read.

Krashen, Lee, and McQuillan (2012) went so far as to state that “providing more access to books can mitigate the effect of poverty on reading achievement” (p. 30). Access to books of interest must also be available at school (Ivey & Johnston, 2018; Merga, 2016; Moss & Young, 2010), but Constantino (2005) reported that in a study of book access in Los Angeles, many school libraries did not have enough copies of high-interest and popular books for the number of students they had. Morrow (2003) and Neuman (1999) wrote that students in classrooms with libraries read 50–60% more than students in classrooms without libraries. In addition, Fractor, Woodruff, Martinez, and Teale (1993) wrote that it is paramount for students to have access to books in the classroom while Kim (2003) added that students who do have access to books in their schools and classrooms are far more likely to read than those students who do not have such access. If teachers do not regularly take students to the school library to check out books, then they should have well-stocked classroom libraries (Routman, 2003). The International Reading Association recommended a minimum of seven books per student in the class, which equates to nearly 200 texts for a classroom of 25 students (Fisher & Frey, 2018). Allowing children to borrow classroom books will inevitably mean that some books are lost, but that is a financial cost that schools need to accept if students are to read at home, particularly in homes where the adults do not themselves encourage or model book-reading. Such access must be provided by teachers for students with reading difficulties, who may not receive reading support from anyone else (Mol & Bus, 2011). Routman (2003) highlighted the importance of a classroom library by

writing, “Classroom libraries are a literacy necessity; they are integral to successful teaching and learning and must become a top priority if our students are to become thriving, engaged readers” (p. 64).

One meta-analysis provided firm support for positive relationships between children’s access to books and positive literary outcomes (Lindsey, 2010). Different programs that distribute books to children, like the Reading is Fun (RIF) program and the First Foundation, demonstrated that the more children read the more their reading proficiency rises (McGill-Franzen et al., 2016). More access to books results in more reading, which leads to better literacy development (Krashen et al., 2012). Unfortunately, Bradley, Corwyn, McAdoo, and Coll (2001) analyzed data from the National Longitudinal Survey of Youth and found that children from low-SES families were more likely to have 10 or fewer books in their home than high-SES families.

Schools should also be very cognizant that they allow students access to high-interest texts. Magazines, graphic novels, and joke and riddle books may captivate reluctant readers (Moss & Young, 2010), and high-interest illustrated storybooks may set them on the route to literacy (Neuman, 2017). Access to a broader range of texts helps to foster a love of reading (Fletcher, Grimley, Greenwood, & Parkhill, 2011; McGeown, Osborne, Warhurst, Norgate, & Duncan, 2016).

Yet far too many children are forced to read from scripted literary programs, leaving them with little choice of texts and less interest in the texts given to them (Levesque et al., 2008). Adults rarely read books that do not interest them, but some educators expect children to develop an interest in reading despite being given access only to books of little interest.

Powell et al. (2006) wrote that scripted literacy programs “can have potentially detrimental consequences for students’ engagement with literacy” (p. 27), while Guthrie (2004) wrote that “in contrast to systematic phonics instruction, literacy engagement is strongly related to the development of reading comprehension” (p. 5). Boyd and Devennie (2009) stated that simply reading aloud is better than using flashcards, dittos, homework, assessments, and book reports and is far less expensive than scripted programs. Cummins (2007) concurred by stating that in contrast to systematic phonics instruction, literacy engagement or simply reading leads to higher reading comprehension, and other studies suggested that this reading engagement can even overcome socioeconomic disadvantages (Guthrie, 2004; Organisation for Economic Cooperation and Development [OECD], 2004).

Manuel (2012) also pointed out that many reading difficulties and lower reading motivation are caused by inappropriate reading texts, and Walp and Walmsley (2007) wrote that the fixed schedule of scripted basal programs is as bad a choice for children who are ahead as they are for children who are behind. Dresser (2012) went so far as to suggest that scripted reading programs have a negative impact not only on the students but also on the teachers who have to use the programs. Providing access to high-interest books is crucial in raising students’ reading interest and comprehension, and allowing students time to read during school is just as critical.

## **Time**

Allowing students independent reading time during school is an opportunity to let them express their own interests while still accomplishing one of a school’s major goals: teaching reading. Yet lack of time can be a roadblock for many teachers to engage students for independent reading (Gallagher, 2009; Kelley & Clausen-Grace, 2010). By engaging students in

independent reading, teachers are able to foster a life-long love of reading (Chua, 2008; Wilhelm, 2016), which is especially significant for students who do not otherwise have time to read outside of school due to various reasons such as limited access to books, family commitments, or other distractions.

Having the time to read in class may be the only time of day that students can actually focus on reading and escape from the stresses in their lives (Sanacore & Palumbo, 2008). Krashen (2004) reported that there are hundreds of correlational studies that show that in-school free reading programs are consistently effective, while several other authors suggested that offering time to read in school is perhaps the most important activity for developing literacy skills (Allington, 1983, 2013; Gallagher, 2009). Elley (1991), whose studies involved more than 200,000 students in 32 countries, found a strong correlation between the amount of time spent reading and reading achievement.

In multiple studies, Merga (2015, 2016) extolled the value of independent reading during school time and said that if students are not given the time during school to read, some of them simply give up reading altogether. Even very early readers can benefit from being given independent reading time (Moss & Young, 2010), which can serve as a powerful accompaniment to skills instruction. The authors continued by recommending that “to make sure students receive enough time for reading, at least 60 minutes per day in school and 20 minutes per day out of school should be provided” (Moss & Young, 2010, p. 24). Students need to learn not just how to read but also why to read. Garan and DeVogd (2008) wrote that the evidence supporting silent sustained reading aligns with the professional judgment of many teachers. Kuhn et al. (2006) wrote that “increasing the amount of time children spend reading challenging connected text with the proper scaffolds will lead to improvements in word reading efficiency and reading

comprehension” (p. 382). And Greaney and Clarke (1975) found that the positive effect of allowing students the time to read during school can last years after the programs have ended. Along with access and time, educators should allow students more choice of what they are going to read in order to encourage their reading and prevent them from becoming aliterate readers.

### **Choice of Texts**

Poor readers in elementary schools are usually placed in remedial reading programs with very limited choice in what they read (Levesque et al., 2008; Manuel, 2012). This approach may help them learn how to read, but it does not encourage them to want to read. As a result, they are never interested in reading, and therefore, they become aliterate readers.

By offering struggling readers a choice of what to read, their interest is piqued (Merga, 2016), and, with more reading, their reading ability improves. Once children have learned the very basics of reading—letter-recognition and phoneme awareness—they need to be given opportunities to choose the books they want to read, which leads to more reading persistence (Ainley, Hidi, & Berndorff, 2002). For most children who arrive at school already knowing the letters, allowing them a choice in what they read should happen immediately. For others, it should happen as quickly as possible so that as children learn how to read, they are also being given reasons why they should read. Young children should be given autonomy to choose what they want to read as early as possible (Mackey, 2014), which may lead to an enjoyable reading experience (Vaknin-Nusbaum et al., 2018). Neugebauer (2013) and Fraumeni-McBride (2017) agreed that when students are given autonomy with their reading choices, their desire to read will increase.

In a 1993 study, Bintz posited that students may not necessarily be reluctant to read but may rather be resistant to reading school-assigned texts. Teachers should have extensive

classroom libraries (Fisher & Frey, 2018), allow frequent library visits (Moss & Young, 2010), and allow students to borrow classroom books in order to increase the amount of choice in their individual classrooms (Ivey & Johnston, 2018).

Fostering pleasurable reading in students by allowing them choice can increase the amount of reading that they do (Fisher & Frey, 2012, 2018; Wilhelm, 2016). Teachers at the elementary level are more likely to allow students choice of what they read (Merga, 2015), a trait that students at the high school level remember as being more influential in whether they enjoy reading or not. McGill-Franzen and Botzakis (2009) recommended that students have available graphic novels, comics, and magazines alongside novels and popular culture texts in order to meet their individual needs, and Worthy and Rosen (2010) agreed that “schools have an important responsibility for providing access to reading materials that are appropriate, appealing, and relevant” (p. 245). Parents, teachers, and principals all play a role in offering students a choice of texts (Fletcher, 2018) and by allowing students a choice, they can help motivate students to read more.

The number of researchers who specifically laud the aspect of giving children choice is extensive. Powell et al. (2006) wrote that choice is a critical feature in affecting students’ engagement with literacy. McGill-Franzen et al. (2016) wrote that “we can say with confidence that interest and choice motivates and sustains reading” (p. 595). Fisher and Frey (2018) said that “when students can choose their reading materials, they are more likely to read. Choice is key to motivation and academic independence” (p. 91). Morgan and Wagner (2013) wrote, “Specifically, offering students choice, time, and good books led to increased student engagement, a deeper sense of identity, a developed sense of agency, and higher state test scores” (p. 660). Sanden (2012) wrote that “studies confirm that providing elementary students

with opportunities to make choices in reading activities increases their motivation to participate” (p. 225). Lu and Gordon (2008) added that their findings “indicate that free choice enriches summer reading” (p. 53). And Ryan and Deci (2000) stated that “choice and the opportunity for self-direction appear to enhance intrinsic motivation” (p. 59). Finally, Wilhelm and Smith (2014) wrote that “if we’re committed to maximizing our students’ textual pleasure, and if we can’t know what books our students are going to take pleasure in, we have to let them choose” (p. 185). Choice is a key ingredient to encouraging students to overcome their aliteracy.

Although a few researchers have concluded that choice by itself has little effect on cognitive engagement (Hannafin & Sullivan, 1996; Morrison, Ross, & Baldwin, 1992; Schraw, Flowerday, & Reisetter, 1998), they were working with high school students, elementary math students, and college students, respectively. Many other researchers working with a wide range of students reached the opposite conclusion (Allington, 2013; Cope, 1997; Gambell, 1993; Gambrell & Marinak, 1997; Hynds, 1990; Manuel, 2012; McGill-Franzen et al., 2016; Morgan & Wagner, 2013).

Allington and McGill-Franzen (2010) summed up the benefit of choice when they wrote that

the best evidence for allowing students to self-select books comes from the meta-analysis of studies designed to improve reading comprehension and motivation done by Guthrie and Humenick (2004). What was most striking was just how powerful student choice was (effect size [ES] = 1.20) in affecting both reading comprehension and motivation. (p. 48)

They and many other researchers concluded that choice is a key factor to improve students’ reading comprehension.

By offering students a choice of what to read, educators can increase their engagement and intrinsic motivation to read, thus increasing the amount of volume that children read, which leads to greater reading comprehension and fewer aliterate readers.

### **Independent Reading**

A major area that distinguishes aliterate readers from other, literate readers is the amount of independent reading or free voluntary reading (FVR) that they willingly do (Krashen, 2004). Again, when any individual does well on an activity, such as reading, he or she develops a positive sense of efficacy for that activity (Wigfield & Tonks, 2004). When beginning readers become frustrated or struggle with reading, they lose interest. Moss and Young (2010) suggested that independent reading “need not be delayed until students master basic reading skills but rather should be provided as a powerful accompaniment to skills instruction” (p. 3). Children should be taught not only how to read at an early age, but they should also be taught why they should read. Kelley and Clausen-Grace (2010) wrote that “independent reading is a classroom practice vital to developing motivated independent readers” (p. 169). Giving young students the time to delve into books independently allows them that freedom and encourages intrinsic motivation to continue reading. Hairrell et al. (2010) wrote that students with reading difficulties need extended opportunities to read silently and independently as well as to engage with others to discuss their reading.

Many teachers agree with the research that suggests that sustained silent reading (SSR) greatly benefits students (Garan & DeVogd, 2008), and there is much research that links regular independent reading to cognitive and literacy improvements (Anderson et al., 1988; Cunningham & Stanovich, 1998; Merga, 2015, 2016; OECD, 2010; Samuels & Wu, 2001; Stanovich, 1986; Thomson et al., 2012). Anderson et al.’s (1988) study of fifth graders demonstrated the power of



independent reading. Those students who read for an hour a day scored at the 98th percentile on standardized reading tests while those who did not read out of school scored at the 2nd percentile. The difference in words read per year for the two groups was in the millions. Even students who read only 20 minutes a day still scored at the 90th percentile in their study. Yoon's (2002) meta-analysis regarding independent reading studies showed that those students who regularly read on their own had significant gains in their reading attitude.

Allington and various co-authors (1983, 2007, 2010, 2013) wrote multiple times about the importance of independent reading. To help poor readers, he suggested that teachers increase the amount of silent reading and consider adding a second reading session. In 1983, Allington wrote that the "amount of silent reading was the single most potent predictor of school reading achievement in studies of 14 high- and low-achievement school districts" (p. 551). Later, he wrote that "the time spent in skill and drill did not increase reading achievement—the time spent actually reading was the best instructional predictor of who read best" (Allington & Walmsley, 2007, p. 7). Still later he wrote that "the most important activity for developing literacy is that of inducing students to read independently [and there are] hundreds of correlational studies reporting that better readers spend more time engaged in silent reading of self-selected books (Allington, 2013, p. 525). He concluded that "there is also evidence that almost everything, from phonemic awareness, to phonics, to comprehension, is developed through independent reading" (Allington, 2013, p. 526).

Many other researchers have agreed with his conclusions. Merga (2016) wrote that for some students, independent reading in the classroom was the only recreational reading they did at all, and Sanacore and Palumbo (2008) stated that "independent reading is especially important in today's hectic world in which children are expected to cope with such out-of-school stresses

as divorce in the family, single-parent households, blended families, and working parents” (p. 71). Gallagher (2009) wrote that “the most powerful motivator that schools can offer to build lifelong readers is to provide students with time in the school day for free and voluntary reading” (p. 75). Pearson and Goodin (2010) cited Taylor et al.’s 1990 study that allowing students “to read independently (compared with a control group that spent an equal amount of time practicing skill sheets) promoted greater achievement on a standardized test” (p. 16), which adds support for those people concerned about the effects of independent reading on school test scores. In a similar study, Block, Cleveland, and Reed (2006) wrote that the addition of 20 minutes of reading time supported vocabulary, comprehension, and fluency development. And Wu and Samuels (2004) wrote that the students who were given an additional 40 minutes a day to read had significantly better reading achievement than did students who were only given an additional 15 minutes of reading time per day. Biancarosa and Snow (2004) and the National Reading Panel (2000) both acknowledged that readers’ fluency is likely to improve with independent reading of a variety of texts. Also, Pilgreen (2000) reviewed 32 studies and reported that students in silent sustained reading groups did as well as or better than control groups in all but two cases. Finally, Sanden (2012) wrote that the students in the most effective and moderately effective schools spent more time independently reading than did students in the least effective schools.

While Cervetti, Bravo, Hiebert, Pearson, and Jaynes (2009) wrote that third and fourth graders, including struggling readers, prefer fiction and nonfiction equally, other researchers laud the benefits of reading fiction in particular. Merga (2016) stated that the effect of reading fiction books had a much more pronounced benefit than reading other texts. Schiefele and Löweke (2017) stated that elementary students have a strong preference for narrative texts, which

McGeown et al. (2014) wrote helps predict advanced reading skills. Whether the texts are fiction or nonfiction may be secondary if a teacher can offer students books that they prefer, which may lead to more pleasurable reading experiences, which may in turn be the last link in turning aliterate readers into literate readers.

### **Pleasurable Reading Experiences**

Finally, the emotion that separates an aliterate reader from other readers is that the aliterate reader experiences no pleasure while reading. Again, Ramsay (2002) defined aliteracy as “an aversion to reading among weak readers” (p. 53), which suggests that aliteracy itself is not necessarily a choice that young readers (or any readers) make but is rather a defense to which they resort in order to cope with the reading demands that are placed on them.

Wilhelm and Smith (2014) wrote that “the studies that examine the impact of leisure reading make a compelling case for its importance” (p. 20), yet if illiterate children do not receive reading encouragement or motivation when they first arrive at school, they will quickly find reading a chore that is unenjoyable and turn to other interests. Both Fletcher (2018) and Manuel (2012) wrote that as teachers are forced to be accountable for teaching specific skills to prepare for standardized tests, reading enjoyment is being pushed out of schools. Gallagher (2009) added that “high-interest reading is being squeezed out in favor of more test preparation practice” (p. 4) and “schools value the development of test-takers more than they value the development of readers” (p. 5). Yet several researchers found that reading for pleasure should be a core part of every child’s curriculum (All-Party Parliament Group for Education, 2011; Chapman & Tunmer, 1997; Mol & Bus, 2011; Wilhelm & Smith, 2014) and that those children who do read for pleasure outperform their peers on reading achievement tests (Becker et al., 2010; Moss & Young, 2010; Powell et al., 2006; Sullivan & Brown, 2013, 2015). Fourth-grade

children who read for fun every day scored higher on the Progress in International Reading Literacy Study (PIRLS) when compared to those who never or almost never read for fun (Moss & Young, 2010), and Mullis, Campbell, and Farstrup (1993) wrote,

Students who read for fun almost every day outside of school scored higher on the (National Assessment of Educational Progress) NAEP assessment of reading achievement than children who read for fun only once or twice a week, who in turn outscored children who read for fun outside of school only once or twice a month, who in turn, outscored children who hardly ever or never read for fun outside of school. (p. 38)

Wilhelm (2016) suggested that there are other emotional, psychological, and cognitive benefits to the power of reading for pleasure and identified four different types of pleasure that a reader can get from reading: immersive play pleasure, in which a reader becomes involved with the text as if the events were happening to the reader; intellectual pleasure, in which the reader is stimulated by the thoughts that the author provokes; social pleasure, in which the reader receives pleasure by sharing the text with others; and the pleasure of work, which can inspire the reader to set goals or emulate the characters.

Elementary teachers and, indeed, all teachers should be asking themselves how they encourage their students to read more and to enjoy reading more. Administrators and parents at all levels should be asking their teachers and themselves the same questions. It is critical to their children's future success that they be taught to enjoy reading. Trelease (2001) suggested that if a child can have a single positive reading experience, what he called a home run book, it can change that child into a reader. Children who do not develop any pleasure from reading "have a very difficult time reading and writing at a level high enough to deal with the demands of today's world" (Krashen, 2004, p. x). It should be no surprise that Guthrie and Greaney (1991) found

that high-interest materials result in students reading for longer periods of time and with more pleasure. As Moss and Young (2010) wrote, “The enjoyment provided by engaging with topics of interest can open students to the pleasure of reading” (p. 17). And in Moss and Young’s (2010) interview with Richard Allington, he said,

We have good evidence . . . that adding 5 or 10 minutes an hour of conversation time in which kids talk to each other or talk to the teacher about the books that they’re reading both improves their understanding of the books that they’re reading and improves their reading comprehension test scores. (p. 31)

Wilhelm and Smith (2014) agreed and wrote that the students they interviewed “suggested that teachers work to encourage conversation-like discussions in which they can be participants” (p. 99). If teachers offer students the opportunity to talk about what they are reading, the students are more likely to both be more interested in reading and to spread interest in books to other students. If parents or caregivers do not instill this sense of pleasure for reading, then early elementary teachers must do so. As Gallagher (2009) wrote, “Teachers must never lose sight that our highest priority is to raise students who become lifelong readers. What our students read in school is important; what they read the rest of their lives is more important” (p. 117).

### **Summary**

If given access to books that interest them and the time to read, children may read more, even the most reluctant readers. Teachers want their students to do well, but too often teachers are ordered to use texts that hold little interest for the students, thus dissuading the students from wanting to read more. Yet as Krashen (2004) wrote, “Reading is the only way, the only way we become good readers, develop a good writing style, an adequate vocabulary, advanced grammatical competence, and the only way we become good spellers” (p. 37). Once children

have mastered the basics of letter-recognition and phonemic awareness, they should be allowed a choice of texts to read, which builds their intrinsic motivation to read more.

For children who enter school with no or little relationship with books, creating a positive relationship is a critical first step to helping them become literate readers. By being encouraged to develop an intrinsic motivation to read, aliterate readers can become motivated readers and catch up to their peers. It is mainly by offering them choice, time, and access to high-interest books while emphasizing intrinsic reading motivation that educators can truly overcome their students' reading challenges and turn aliterate readers into literate, life-long readers.

## **CHAPTER THREE: METHODS**

### **Overview**

The purpose of this applied study was to solve the problem of aliteracy for upper elementary students at Smith Academy (all names are pseudonyms), which required a multimethod design incorporating both qualitative and quantitative methods.

Aliteracy is a growing problem among America's elementary students, and elementary school teachers and administrators struggle with solving the issue. There are many factors that lead to a student becoming an aliterate reader, such as lack of access to books and lack of parental support or role models, but what most schools are doing is not working. It is no coincidence that "the same percentage (1/3) of kids who don't know their letter names upon kindergarten entry matches perfectly with the number of fourth graders who read below the Basic level" (Pressley & Allington, 2014, p. 130). Solving the aliteracy problem may lead to a significantly improved future for the students who are least likely to succeed without an intervention for their reading skills.

This chapter will provide details concerning the design, research questions, setting, participants, procedures, researcher's role, data collection methods and ethical considerations for this study.

### **Design**

In this multimethod applied research study, both qualitative and quantitative methods were used. Three different data collection approaches, including qualitative interviews, a qualitative focus group, and quantitative surveys, were employed. This design was an appropriate choice as it was intended to "test the existence of a causal relationship between two

or more variables” (Bickman & Rog, 2009, p. 16) and may be able to identify possible causes of aliteracy as well as possible solutions.

An applied research method was an appropriate design to use to help solve the aliteracy problem for upper elementary students. Check and Schutt (2012) wrote that the principal goal of action or applied research is to create change in an organization, and it is possible that some applied research has the potential to effect change across the nation and beyond. Yet applied research is usually based on other, previous research (i.e., grounded theory); in other words, applied research often relies on the findings of basic research. For instance, when researching what motivates children to read, a researcher would do best to discover what motivates children in the first place, and so, the researcher turns to basic research in order to build on what is known and then apply it to the particular interest of aliteracy in elementary students.

A further distinction between basic and applied research could be made using the terms research and development. Basic research is that which aims to discover basic truths; applied research aims to take those truths and develop them with specific goals. Using children’s reading motivation as an example again, since intrinsic motivation has been shown to be a more powerful force than extrinsic motivation (Bear, Slaughter, Mantz, & Farley-Ripple, 2017; Becker et al., 2010; Bénabou & Tirole, 2003), using their basic findings, a researcher could then try to discover ways (applications) that a teacher could use to intrinsically motivate students to read, thus helping to solve the aliteracy problem.

Bickman and Rog (2009) also explained that an applied research design allows for several data collection methods as well as answering several research questions. A purely quantitative study may not supply an explanation of how aliteracy begins or how those involved, i.e., students and parents, may prevent aliteracy; however, neither would a purely qualitative



study provide statistical support to demonstrate the various degrees of aliteracy. By combining the two in an applied study, subtle nuances may be discovered to explain how aliteracy in elementary students begins and the means of preventing aliteracy. Bickman and Rog (2009) wrote that “mixed methods are used to gain complementary views about the same phenomenon or relationship . . . [and] are used to make sure a complete picture of the phenomenon is obtained” (p. 287). Finally, Gall, Gall, and Borg (2007) wrote that “applied research, virtually by definition, seems more likely to contribute to the improvement of educational practice” (p. 14), which was the ultimate aim of this study about solving aliteracy in the upper elementary grades. The qualitative components of this study included an interview with students as well as a focus group with teachers, while the quantitative component was comprised of a Likert-scale survey, for which questions were developed based both on the literature review as well as the Motivation to Read Profile-Revised (Malloy, Marinak, Gambrell, & Mazzoni, 2013).

### **Research Questions**

**Central Question:** How can the problem of aliteracy be solved at Smith Academy, located in central Georgia?

**Sub-question 1:** How would students in an interview solve the problem of aliteracy at Smith Academy located in central Georgia?

**Sub-question 2:** How would quantitative survey data inform the problem of aliteracy at Smith Academy located in central Georgia?

**Sub-question 3:** How would teachers in a focus group solve the problem of aliteracy at Smith Academy located in central Georgia?

### **Setting**

The setting of the study was Smith Academy located in central Georgia. The school provides after-school care for elementary children whose parents work later in the day and has an enrollment of approximately 75 students from seven different neighboring elementary schools. This school was chosen as it is in a suburban area and, though it is in an affluent area, still has many struggling readers. The school is led by an academic director and offers help with homework, reading, math, as well as elective classes such as drama, Chinese, and chess. As the school has a wide variety of students from different elementary schools, they face the challenge of raising their students' reading abilities and improving their reading attitudes in order to increase their overall academic performance. The school needs a better, research-supported approach to raising their students' reading abilities.

### **Participants**

For this study, the participants were a purposeful, nonprobability sample (Bickman & Rog, 2009). The first part of the study included 41 students in Grades 3, 4, and 5 who took part in a quantitative survey. The survey identified the 18 students (see Table 1) who were the most aliterate (capable of reading but choosing not to read) or reluctant readers. This type of sampling is "best used to provide information about specific cases or members of the study population that are intrinsically interesting or important for the study" (Bickman & Rog, 2009, p. 79) and includes the participants who "will best help the researcher understand the problem and the research question" (Creswell & Creswell, 2018, p. 185).

Table 1

*Participant Demographics*

| Grade | Male | Female |
|-------|------|--------|
| 3rd   | 2    | 4      |
| 4th   | 2    | 4      |
| 5th   | 2    | 4      |

The participants for the qualitative interview were six third-graders, six fourth-graders, and six fifth-graders, who were chosen based on the results of the quantitative survey. In this sample, two participants were males in the third grade; two participants were males in the fourth grade, and two participants were males in the fifth grade; four participants were females in the third grade; four participants were females in the fourth grade, and four participants were females in the fifth grade.

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

The researcher was a 30-year veteran high school language arts teacher whose 10th-grade students in his last five years of teaching had an average reading level on the seventh grade when they entered his classroom in August, which meant that half of the 10th-grade students were reading on a fourth-, fifth-, or sixth-grade level. It was his belief that educators must intervene as early as possible with students who either struggle to read or choose not to read in order to help them reach their academic potential. His relationship with the participants was that of a student to learn from them how to interest children in reading. He had a very strong bias (belief) that “our highest priority is to raise students who become lifelong readers” (Gallagher, 2009, p. 117), which meant turning students from being aliterate readers to being literate readers. During the study, the researcher's role was to glean the various perspectives from the students and teachers

about the strategies that could be used at the elementary level to interest students in reading and increase their volume of reading as well as their intrinsic motivation to read. For the qualitative components, the researcher served as the interviewer and lead. For the quantitative component, the researcher conducted the surveys individually with every student.

### **Procedures**

First, approval was obtained from the Liberty University Institutional Review Board (IRB; see Appendix A). This included gaining approval and defending the research proposal. The IRB review process included the General IRB Application and Signature Page, which were forwarded to the researcher's dissertation chair, who reviewed and advised changes. The IRB also suggested revisions prior to applying for approval from the School Director of Smith Academy. Written permission was obtained from the director of the school (see Appendix B). All parental permissions were obtained from the participants' parents prior to both the survey and the interviews (see Appendix C). Student assent forms were obtained prior to both the survey and the interviews (see Appendix D). The researcher had previously served as a drama teacher at Smith Academy and understood that during the course of the study he was guest of the school and was expected to behave accordingly. The possibility of a great benefit to the students, being better readers who are progressing toward reading on grade-level, helped ensure that the study was an ethical one that could lead to significant academic gains. There were no grades given at the Academy, so there was no undue influence on the students to perform or respond differently than they normally would. All data were stored at the researcher's home and included password protection for electronic files. Pseudonyms were used for all participants and the school. The data were collected via qualitative interviews, a qualitative focus group, and quantitative surveys by the researcher, who met with the students and teachers for the surveys,

interviews, and focus group as the school's schedule allowed. To answer the research questions, interviews were conducted as the school's schedule allowed as well.

### **Data Collection and Analysis**

This applied research study employed both qualitative and quantitative approaches to gathering data, including qualitative interviews, a quantitative survey, and a qualitative focus group as specified in the Liberty University Applied Dissertation Template (Liberty University, 2019). By using multiple data sources, triangulation was achieved “to measure a construct or a phenomenon in order to see if they converge and support the same conclusions” (Bickman & Rog, 2009, pg. 22). The two qualitative data collection methods helped convey the complexity of the problem, aliteracy, from narrative perspectives while the quantitative approach, the survey, provided numerical support for the conclusions (Creswell & Creswell, 2018) as well as avoided any influence of the researcher's bias. Each of these methods were used to address one of the sub-questions, and the data were analyzed to develop a solution to the problem of aliteracy at Smith Academy.

### **Interviews**

The first sub-question for this study explored how students in an interview would solve the problem of aliteracy at Smith Academy located in central Georgia. The interviews were conducted face-to-face with the researcher and then transcribed.

The study utilized the NVivo 12 software program to complete open coding from the semi-structured interviews using open-ended questions to develop categories to identify themes concerning the attitudes of the participants toward reading and what would interest them more in reading. This coding helped “to develop a general understanding of what is going on, to generate themes and theoretical concepts, and to organize and retrieve [the] data to test and support these

general ideas” (Bickman & Rog, 2009, p. 237). Axial coding, which is “the process of relating categories to their subcategories” (Strauss & Corbin, 1998, p. 123) then took place to further address the central theme(s) followed by selective coding, which is the “process of integrating and refining the theory” (Strauss & Corbin, 1998, p. 143). The use of open-ended questions “generate[s] in-depth information, which may lead to reconceptualization of the issues under study” (Bickman & Rog, 2009, p. 296).

Eighteen upper elementary students selected from a group of 41 participants who were identified by the quantitative survey as being the most aliterate or reluctant readers were interviewed at the school in a one-to-one, face-to-face format after receiving parental permission. Each interview was recorded and lasted approximately 15 minutes and was then transcribed. The researcher noted body language and tone during the course of each interview to convey a sense of the participant’s feelings toward each question and topic. Most questions led to follow-up discussions, which elicited further information. Prior to the questioning, the researcher explained the purpose of the interview so that each participant understood the study. After the students’ parents consented to their children’s participation, the following questions were asked (see Appendix E):

*1. Would you please tell me how you feel about reading, both at your elementary school and at home?* This question was intended to elicit the student’s overall feelings toward reading. As Allington and Walmsley (2007) explained, children need to value reading before they actually begin reading. The question could also explain the general reading support that children have at home as well. Understanding children’s basic attitude toward reading can demonstrate whether they are an aliterate reader or not, a child who is capable of reading but chooses not to.

Whether children responded favorable or unfavorably toward reading helps to define their attitude (McKenna et al., 2012).

*2. What are some of the reasons why you like to read or why you do not like to read?*

This question was intended to help identify aliterate readers as well as to determine their self-efficacy or beliefs about their own reading abilities. In order to engage young readers, it is important for them to overcome initial obstacles to reading by the third grade (Peklaj & Pecjak, 2009). Students who feel competent at an activity such as reading are generally more interested in the activity (Walgermo et al., 2018). Students may be able to give reasons why they considered themselves to be good readers or not.

*3. What were your thoughts about reading before you ever started school?* This question aimed to identify whether students could name a time in their life when they enjoyed reading, prior to becoming either aliterate or a reluctant reader. Early childhood experiences play an integral role in later reading competence (Becker et al., 2010). This question may also identify whether schools play a role in whether students enjoy reading or not as Merga (2015) suggested that aliterate students may receive less encouragement to read than others.

*4. How did you learn to read?* This question's purpose was to identify further the causes of a student's becoming aliterate or a reluctant reader. Whether it was due to specific texts (Allington, 2013; Tatum & Muhammad, 2012), use of a scripted program (Walp & Walmsley, 2007), because reading is considered to be a threatening activity (Alexander & Jarman, 2018; Nielen et al., 2016), or other reason, perhaps the students could identify the specific activities that turned them away from reading.

*5. How often do you read?* This question's purpose was to further identify whether the student ever chose to read or whether the only time he or she read was when he or she was forced

to read. Students' engagement with reading is a clear indication whether they will continue to read a text or not (Ainley et al., 2002).

6. *What do you remember about a book that you liked or a favorite book?* The purpose of this question was to discern whether students had ever become engaged with a book to the point of remembrance. Tadesse and Washington (2013) explained that the first step toward mastery of reading is to become interested and engaged in the reading itself. Guthrie (2004) wrote that engaged readers spend 500% more time reading than disengaged readers, which may help explain whether a child has a favorite book or not.

7. *If you like reading less now, why do you think that is?* The purpose of this question was to gain clarity as to the reasons students suggested about their reading interests and why they like reading less. Cope (1997) wrote that the strongest memories of the children in his study were negative ones. The question "What is causing students to enjoy reading less?" is at the heart of aliteracy and the children's answers may help identify causes of aliteracy as well as lead to possible solutions.

8. *Please tell me about reading at both your elementary school and at this Academy. How often do you read? What does your teacher ask you to read?* This question's purpose was to further elicit information about the student's reading practices, specifically at school. Allen (2003) explained that the text choices that teachers make may lead to less interest in reading for students. Kohn (1993) wrote that the more autonomy children are given by their teachers, the more likely they are to be willing readers.

9. *Tell me about reading at home. How often do you read at home? What do you read at home? What does your parent ask you to read?* This question sought to determine the student's reading practices at home. Aliterate readers avoid reading unless it is demanded of



them, i.e., extrinsic motivation (Becker et al., 2010). Students may give a further explanation about their reading habits at home and whether they were aliterate readers or not.

*10. What choices are you able to make about what you read at your elementary school, here at the Academy, or at home? How often are you allowed to choose a book at either school or at home?* The purpose of this question was to understand the role of choice in a student's reading habit. Reynolds and Symons (2001) wrote that choice is an important determinant of literacy processes for children, and Moller, Deci, and Ryan (2006) concurred that any time a person can experience autonomy could boost their intrinsic motivation in an activity such as reading.

*11. What types of books do you think you would like to read?* The purpose of this question was to elicit suggestions from the students as to the types of books that they would willingly read. This may help drive the solution for aliteracy. Allington (2013) wrote that by providing more books that students want to read, educators may engage students more, which may then increase the volume of reading that students do, which will lead to better reading comprehension.

*12. What can you tell me about the books that you currently have available at either school or at home?* The purpose of this question was to understand whether students had access to books that were of interest to them. Powell et al. (2006) explained that books of interest may be intrinsically motivational for students. If students were unable to physically find these books, then they may be less motivated to read.

*13. What do you think would make other students like reading more?* The purpose of this question was to ask the students for their suggestions as to how to increase the amount of reading that students willingly do. The amount of time spent reading contributes significantly to gains in

students' reading achievement (Taylor et al., 1990), so if students could suggest ways to encourage more reading, perhaps it can lead to a solution to aliteracy.

*14. What do you think would make you like reading more?* Similar to Question 13, the purpose of this question was to ask the students for their suggestions as to how to increase the amount of reading that they specifically would willingly do. The amount of time spent reading contributes significantly to gains in students' reading achievement (Taylor et al., 1990), so if students could suggest ways to encourage their own reading volume, perhaps it could lead to a solution to aliteracy.

*15. Finally, there are 50 books on these racks. Please point to up to 10 books that you might be interested in reading.* This question was designed to identify possible texts for schools to consider acquiring or making available in their classrooms or library. Manuel (2012) wrote that a wide variety of reading material is a critical factor in ongoing reading achievement.

When all of the interviews were transcribed, coding was used to determine the possible themes to emerge. From this, the frequency of each category was reported on a question-by-question format in the Chapter Four Findings.

## **Survey**

The second sub-question for this study explored how a quantitative survey from students informed the problem of aliteracy at Smith Academy located in central Georgia. The Likert-scale, close-ended survey was administered individually to 41 third-, fourth-, and fifth-grade students at Smith Academy as the schedule permitted. Much of the survey was based on the Motivation to Read Profile-Revised (Malloy et al., 2013). The researcher administered the surveys (see Appendix F). The surveys were collected by the researcher and then analyzed using the Likert-scale to determine whether the students agreed or disagreed with the statements. This

helped identify those students who were either aliterate or reluctant readers and helped lead to an explanation of their attitudes toward reading and what may interest them more in reading. The questions included the following:

1. My friends think I am

\_\_\_\_\_a very good reader \_\_\_\_\_a good reader \_\_\_\_\_an OK reader \_\_\_\_\_a poor reader

The question was designed to identify the student's self-efficacy as a reader, which has been found to be positively related to his or her reading motivation (Medford & McGeown, 2012).

2. Reading a book is something I like to do

\_\_\_\_\_never \_\_\_\_\_almost never \_\_\_\_\_sometimes \_\_\_\_\_often

This question was intended to elicit how valuable the student thought reading was. If a child is motivated to read, this significantly predicts reading comprehension (Park, 2011).

3. My friends think reading is

\_\_\_\_\_really fun \_\_\_\_\_fun \_\_\_\_\_OK to do \_\_\_\_\_no fun at all

Gender differences in reading can affect reading motivation (McGeown et al., 2014), and students may identify with their friends. This question sought to clarify the influence that students around the child may have, both positively and negatively.

4. I read

\_\_\_\_\_not as well as my friends \_\_\_\_\_about the same as my friends  
 \_\_\_\_\_a little better than my friends \_\_\_\_\_a lot better than my friends

This question revolved around self-efficacy and whether the student identified as competent as peers. Peklaj and Pecjak (2009) identified self-efficacy as the most important factor connected to students' achievement. If a student believed that he or she was a capable reader, then he or she was likely to read more and, as a result, read better.

5. I tell my friends about good books I read

\_\_\_\_\_ I never do this

\_\_\_\_\_ I almost never do this

\_\_\_\_\_ I do this some of the time

\_\_\_\_\_ I do this a lot

This question identified how valuable students believe that reading was. If a student was motivated enough to share information about books with peers, then the student valued reading. Such motivation manifests itself in the outcomes of reading (Guthrie et al., 2000), such as sharing a book with another student.

6. People who read a lot are

\_\_\_\_\_ very interesting

\_\_\_\_\_ sort of interesting

\_\_\_\_\_ sort of boring

\_\_\_\_\_ very boring

This question identified a student's perception about reading and whether the child valued reading. Those who read frequently are linked to advanced cognitive progress in adolescence (Sullivan & Brown, 2015).

7. I am

\_\_\_\_\_ a poor reader    \_\_\_\_\_ an OK reader    \_\_\_\_\_ a good reader    \_\_\_\_\_ a very good reader

This question again addressed self-efficacy and the student's perception of him or herself as a reader. If a student felt competent at reading, he or she was more likely to be interested in it and to value reading (Walgermo et al., 2018).

8. I think becoming a good reader is

\_\_\_\_\_not very important                      \_\_\_\_\_sort of important

\_\_\_\_\_important                                      \_\_\_\_\_very important

This question also addressed whether the student valued reading or not. Whether a student values reading as a source of enjoyment and importance influences the student's intrinsic reading motivation (Becker et al., 2010).

9. I think spending time reading is

\_\_\_\_\_really boring    \_\_\_\_\_boring    \_\_\_\_\_great    \_\_\_\_\_really great

This question also elicited how valuable the student considered reading to be. If students find reading to be a stimulating leisure time occupation, they are less likely to need reading intervention (Mol & Bus, 2011).

10. Reading is

\_\_\_\_\_very easy for me                      \_\_\_\_\_kind of easy for me

\_\_\_\_\_kind of hard for me                      \_\_\_\_\_very hard for me

This question also related to self-efficacy and whether the student considered him or herself to be a good reader. Those readers who consider themselves to be weak readers may avoid reading as a result (Ramsay, 2002).

11. When my teacher reads books out loud, I think it is

\_\_\_\_\_really great    \_\_\_\_\_great    \_\_\_\_\_boring    \_\_\_\_\_really boring

The early childhood Head Start task force found that a child's pleasure in reading experiences greatly affects his or her overall reading abilities, and teachers are encouraged to read aloud to beginning readers several times during the day (Dynea & Justice, 2015). This question was intended to discover if the child enjoyed the experience of being read to and, as a result, would

be more likely to become a literate reader than an aliterate reader. Valentini, Ricketts, Pye, and Houston-Price (2018) wrote that allowing children to hear stories while they are reading along may be optimal for learning.

12. When I have free time, I spend

\_\_\_\_\_none of my time reading      \_\_\_\_\_very little of my time reading

\_\_\_\_\_some of my time reading      \_\_\_\_\_a lot of my time reading

This question was to judge whether the student was intrinsically motivated to read and chose to use his or her time reading. Intrinsic incentives are better predictors of reading frequency and comprehension than extrinsic incentives are (Schiefele & Löweke, 2017).

13. When I read out loud, I am a

\_\_\_\_\_poor reader    \_\_\_\_\_OK reader    \_\_\_\_\_good reader    \_\_\_\_\_very good reader

This question also dealt with self-efficacy and whether a student was confident in his or her ability to read in front of peers or to a teacher. If a student has advanced reading ability, then the student's ability to learn across the entire curriculum is enhanced (Sullivan & Brown, 2015).

14. If I were given time at my elementary school to read, I would

\_\_\_\_\_not read    \_\_\_\_\_read a little    \_\_\_\_\_read more    \_\_\_\_\_read a lot more

This question also related to whether the student valued reading or not. Aliterate students do not value reading, and so they do less of it. Attitudes toward reading generally worsen over time (McKenna et al., 2012).

15. If I could choose what I read at my elementary school, I would

\_\_\_\_\_not read    \_\_\_\_\_read a little    \_\_\_\_\_read more    \_\_\_\_\_read a lot more

This question sought understanding about the role that choice plays in aliteracy. If a student is allowed more choice of texts, he generally reads more (Fisher & Frey, 2012). Likewise, students

who are older than 8 years engage in silent, independent reading as a positive means to practice their fluency (Reutzel, Petscher, & Spichtig, 2012).

16. When someone gives me a book for a present,

\_\_\_\_\_ I am very happy

\_\_\_\_\_ I am happy

\_\_\_\_\_ I am unhappy

\_\_\_\_\_ I am very unhappy

This question also related to how much a student valued reading and its associated components, such as receiving a book as a gift. Students who value reading highly are better readers (Allington & Walmsley, 2007)

17. When I start a new book, I feel

\_\_\_\_\_ very happy    \_\_\_\_\_ happy    \_\_\_\_\_ unhappy    \_\_\_\_\_ very unhappy

This question was designed to understand how a student felt when faced with a new book. In general, a student's positive attitude denotes that the student places a higher value on reading, which is linked to substantial cognitive progress (Sullivan & Brown, 2015).

18. When I read my textbooks, I feel

\_\_\_\_\_ very happy    \_\_\_\_\_ happy    \_\_\_\_\_ unhappy    \_\_\_\_\_ very unhappy

When reading informational texts, students may show little statistical improvement as opposed to reading fiction books (Neuman, 2017). This question was designed to test whether students feel differently about reading informational texts or fictional texts.

19. If I go to the library, I will usually

\_\_\_\_\_ not find a book I like

\_\_\_\_\_ sometimes find a book I like

\_\_\_\_\_ often find a book I like

\_\_\_\_\_ always find a book I like

This question was designed to see whether students were motivated to find a book that they liked if they were given the opportunity. Having access to books of interest is part of an effective school-wide reading program (Moss & Young, 2010).

20. If I could choose, I would read

\_\_\_\_\_not at all

\_\_\_\_\_less than I do now

\_\_\_\_\_more than I do now

\_\_\_\_\_a lot more than I do now

This final question addressed a child's reading motivation and whether he or she was aliterate or not. A child who is capable of reading but chooses not to is inherently defined as aliterate (Merga, 2016).

### **Focus Group**

The third sub-question for this study explored how educators in a focus group would solve the problem of aliteracy for their students at Smith Academy located in central Georgia and followed the same analysis and coding as the interviews. The focus group, which Bickman and Rog (2009) describe as being a combination of interviewing and observation generally employing open-ended questions, was conducted face-to-face with the interviewer. Krueger and Casey (2000) defined a focus group study as "a carefully planned series of discussions designed to obtain perceptions on a defined area of interest in a permissive, non-threatening environment" (p. 5). The conversation was transcribed and imported into the NVivo 12 software program which facilitated open coding, axial coding, and selective coding to identify themes that the educators suggested to help solve the problem of aliteracy in their students. The educators also identified obstacles in the county, individual schools, individual classrooms, or homes that were applicable to the study.



Six Academy teachers gathered for a focus group discussion at the school in a face-to-face format (see Appendix G). The focus group discussion, which lasted approximately 30 minutes, was recorded and then transcribed. The researcher noted body language and tone during the course of the discussion to convey a sense of the participants' feelings toward each question and topic. Some questions led to follow-up discussions, which elicited more information. Prior to beginning the discussion, the researcher explained the purpose of the focus group so that each participant understood the study. After participants consented to participate (see Appendix H), the following questions were used to initiate or stimulate conversation and a discussion among the focus group members:

*1. Are you familiar with the term aliteracy? It can mean either someone who is able to read but chooses not to or someone who is a weak reader and therefore avoids reading. What does that mean to you?* The purpose of this question was to ensure that teachers understood the term aliteracy and were able to identify students who are truly aliterate: a student who is capable of reading but chooses not to (Merga, 2016) or a student with an aversion to reading because of being a weak reader (Ramsay, 2002). A student who was a poor reader because of a cognitive disability should not be identified as aliterate.

*2. Do you have any students who you believe would qualify as aliterate readers? How would you describe them?* This question sought to further elicit understanding of aliteracy on the part of teachers. Being able to identify students in their classroom who avoid reading due to a reading weakness is crucial in helping them to reading interventions that work rather than entering remediation that prevents proficient reading (Chapman & Tunmer, 1997).

*3. What ways have you tried to encourage your weaker readers to read more?* This question was intended to discover whether teachers were using research-based strategies to help

their students or were relying on methods that may exacerbate the problem with worksheets or inappropriate texts (Allington, 2013).

4. *What kinds of books do your students have available to them?* This question allowed the teachers to address the problem of access to books and whether the students had books that interested them in the classroom. Such access has multiple improved outcomes for children (Lindsey, 2010; Tadesse & Washington, 2013).

5. *Can you describe the kinds of books that your students like to read? How do you feel about offering them time during school to read the books they like?* This question was intended to discover whether teachers were willing or able to devote time in school to silent reading, which Sanacore and Palumbo (2008) cited as especially important for students who have little time outside of school to read. Krashen (2004) explained that there are hundreds of correlational studies that report that better readers spend more time engaged in silent reading of self-selected books.

6. *Can you think of any ways to get reluctant elementary readers to read more?* This question allowed the teachers to offer suggestions to solve the aliteracy problem in their specific school and with their specific students. If teachers are given the autonomy to choose the texts, materials, or methodology, they could create great schools (Monroe, 1997), and perhaps these teachers could offer suggestions how to encourage aliterate students to become literate and willingly read more.

### **Ethical Considerations**

By following specific guidelines, a researcher should be able to ensure that a study will be done in an ethical manner, especially after the study has been approved by an Institutional Review Board. Check and Schutt (2012) are fairly straightforward about how to conduct

research in an ethical manner. They cite five specific directions: “cause no harm to subjects . . . subjects must give their informed consent . . . researchers should fully disclose their identity . . . confidentiality must be maintained . . . benefits from a research project should outweigh any foreseeable risks” (p. 50).

In the particular case of this study, the researcher worked with third, fourth, and fifth graders, who understood what they were asked to do during the course of the study. The possible benefits to the students, in the form of increased literacy, far outweighed any foreseeable risk that the students may have faced, which were virtually non-existent. In this way, and having obtained the Institutional Review Board’s approval, the research proceeded in an ethical manner.

### **Summary**

Much research has been done about how children learn to read, yet not as much has been conducted about why children become aliterate. Once more, Pressley and Allington’s (2014) note that “it is almost eerie that the same percentage (1/3) of kids who don’t know their letter names upon kindergarten entry matches perfectly with the number of fourth graders who read below the Basic level” (p. 130) suggests that what elementary schools are currently doing does very little to inspire their students to become readers. Elementary schools tend to rely on scripted literacy programs to raise their struggling students’ reading levels, but these programs have been found to negatively impact the students’ reading (Dresser, 2012; Powell et al., 2006). Many studies support the idea that to improve a students’ reading ability, educators need to encourage students to read more (Cunningham & Stanovich, 1998; Fisher & Frey, 2018; Merga, 2016; Mol & Bus, 2011; Sparks et al., 2013), and the best way to get students to read more is to encourage them to want to read more. This intrinsic motivation, strengthened through improving

self-efficacy, increasing reading volume, increasing access to high-interest texts, offering time in school to read, and allowing students more choice of what to read, is a crucial piece of the reading puzzle that too many elementary schools may be neglecting. In their pursuit of literacy, elementary schools have focused on teaching students how to read and have forgotten to teach students why they should read, thus turning too many of their illiterate readers into aliterate readers.

## **CHAPTER FOUR: FINDINGS**

### **Overview**

The purpose of this study was to solve the problem of aliteracy for upper elementary readers at Smith Academy and then to design a reading program to address future aliteracy problems. The problem was that too many upper elementary children become aliterate readers. The research questions explored in this study were as follows:

Central Question: How can the problem of aliteracy be solved at Smith Academy, located in central Georgia?

Sub-question 1: How would students in an interview solve the problem of aliteracy at Smith Academy located in central Georgia?

Sub-question 2: How would quantitative survey data inform the problem of aliteracy at Smith Academy located in central Georgia?

Sub-question 3: How would teachers in a focus group solve the problem of aliteracy at Smith Academy located in central Georgia?

This chapter will present the results of the interviews, surveys, and focus group discussion.

### **Participant Demographics**

This study used participants from an after-school learning center, Smith Academy, located in an economically upper middle-class area in central Georgia. Smith Academy serves a largely Asian population; most of the students are of mixed-race, half-Caucasian and half-Asian. Participants included 41 students initially surveyed, which led to the 18 students being selected who most indicated aliterate tendencies. These 18 students (see Table 2) were then interviewed. Six students were from the third grade (two males and four females), six students were from the

fourth grade (two males and four females), and six student were from the fifth grade (two males and four females). Interviewed students represented seven different elementary schools, including one private school (School F). All the schools are located in central Georgia; Schools A, B, C, E, and G are in one county, and Schools D and F are in a neighboring county. Their demographics are provided in Tables 2 and 3.

As Table 2 indicates, there were a total of six students (3 third graders and 3 fourth graders) from School A; three students (2 third graders and 1 fourth grader) from School B; 1 fifth grader from School C; three students (1 third grader, 1 fourth grader, and 1 fifth grader) from School D; 2 fifth graders from School E; 1 fifth grader from School F; and two students (1 fourth grader and 1 fifth grader) from School G. Two of the students, #6 and #18, were Caucasian; four of the other students—#5, #12, #13, and #14—had one parent who was Caucasian and one who was Asian, and the remaining students were Asian.

Table 2

*Student Demographics*

| Grade | Student | Gender | School |
|-------|---------|--------|--------|
| 3     | 6       | M      | A      |
| 3     | 2       | F      | A      |
| 3     | 12      | F      | B      |
| 3     | 13      | F      | B      |
| 3     | 7       | F      | A      |
| 3     | 18      | M      | D      |
| 4     | 9       | F      | B      |
| 4     | 10      | M      | A      |
| 4     | 11      | M      | A      |
| 4     | 15      | F      | D      |
| 4     | 3       | F      | G      |
| 4     | 1       | F      | A      |
| 5     | 4       | F      | C      |
| 5     | 5       | M      | D      |
| 5     | 16      | F      | E      |
| 5     | 8       | F      | E      |
| 5     | 17      | F      | G      |
| 5     | 14      | M      | F      |

*Note.* Student number indicates the order in which the students were interviewed. This was at the teachers' convenience.

Student 1, a fourth-grade female from School A, considered herself an “okay” reader but said she did not read as well as her friends. She also said that she feels “a little worse” about reading at home rather than at school “because I have to read out loud, and I don’t like reading out loud.”

Student 2, a third-grade female from School A, thought she was a good reader who read about the same as her friends. She was the most enthusiastic female student about reading and could name her favorite book, *Wings of Fire*, “because it has dragons.”

Student 3, a fourth-grade female from School G, said she spends “some of [her] time

reading” and if she was given more choice would read “more than I do now.” She also said that she likes the Harry Potter books “cause it has magic in it, and I feel like I’m just with the characters.”

Student 4, a fifth-grade female from School D, was one of the most aliterate readers who said that if she has free time, she spends “none of [her] time reading” although she said that reading is sometimes something she likes to do. She also never talks with friends about books and explained that usually she “would have something funner to do or have to do work” rather than read.

Student 5, a fifth-grade male from School D, explained that one of the reasons he did not like to read was “because sometimes I have to focus on other stuff like basketball.” He said he reads about as well as his friends and considered himself a good reader, but in his free time spends “very little of my time reading.”

Student 6, a third-grade male from School A, was the most enthusiastic male reader of the group, though he thinks that reading is “kind of hard for me.” He said that reading was “great,” but that he likes “playing [video] games.”

Student 7, a third-grade female from School A, said after a big sigh that reading was “fine, but I really don’t do it that often.” She considers herself a good reader but spends “very little” of her free time reading and thinks that when a teacher reads out loud, “it is boring.”

Student 8, a fifth-grade female from School E, said she reads about three days a week at home and only two days a week at school. Sometimes when “mom says that I can’t do anything, I just go up to my room and read.”

Student 9, a fourth-grade female from School B, reads “about the same as [her] friends” and considers herself “an okay reader.” She also considers it boring when her teacher reads out



loud, and said that she does not like to read “when the book’s, like, babyish. Or I don’t understand any of the words.”

Student 10, a fourth-grade male from School A, was the most aliterate student of all. He said that he does not like to read at home “because I don’t have as much time because I have to do my homework.” He could also not think of any reason why he might like to read and explained emphatically that he did not like to read “because it’s boring.” He did acknowledge that there might be books that he would like to read.

Student 11, also a fourth-grade male from School A, said that reading a book is “sometimes something I like to do” and that if he has free time, he spends “some of my time reading.” He said that he does not like to read if “there are a lot of people around me, and I can’t concentrate.” He was also adamant about not liking “girl books” and preferred books that were funny.

Student 12, a third-grade female from School B, said that sometimes she likes “to read because I will learn more and study more” but that “I don’t like to read because I’m going to be bored.” She also considers herself to be “a very good reader” but she only spends “some of my time reading” in her free time.

Student 13, a third-grade female from School B, explained that when she reads at home, she usually get[s] distracted with things, like, anything that makes noise . . . say, my mom made a beep in her room, and I get distracted, and then I just lose focus, and I don’t know what I do. I just start wandering out and doing what I want then.

She also said that at school she reads, “like about, about every day, a few minutes before I get distracted . . . I lose focus and I start on track and I lose focus. Yeah. It just repeats until the

reading time is ended.”

Student 14, a fifth-grade male from School F, said that he likes to read about wars. He explained that “sometimes I don’t have enough time [to read]. I just have to do my homework.”

Student 15, a fourth-grade female from School D, considers herself to be “a very good reader.” If she were given more choice at her school of what to read, she would “read a lot more.” She also explained that though there are a lot of books at home, she does not like to read at home because “I’ve read a lot of [the books].”

Student 16, a fifth-grade female from School E, spends “some of [her] time reading” in her free time. She said that she does not like to read “because sometimes the beginning is boring.” When asked if there were books in her classroom she wanted to read, she replied, “Um, not really,” and that her teacher did not let the students go to the library.

Student 17, a fifth-grade female from School G, said that reading a book is “sometimes” something she likes to do, but that she “almost never” talks about books with her friends. She also does not like reading “cause I want to do something else.” She had no memory of ever being read to by her parents and said that at her school, “um, we’re supposed to read every day, but sometimes we have to do other things, like testing.”

Student 18, a third-grade male from School D, said several times that reading was boring and that he would rather “watch iPad” than read. He explained that the books at home “have too many words and not enough pictures” and that his favorite books were the Dogman graphic novels.

Table 3 provides a breakdown of each elementary school each student attends, including the total number of students, the student to teacher ratio, the school’s ethnicity, and the free or reduced lunch rate. As can be seen, the seven schools were from a mostly affluent area with a

high percentage of Asians. The highest percent of free or reduced lunch was only 13.9% and the lowest was 3.3%, while the Asian population ranged from a low of 24.1% to a high of 66.2%.

Table 3

*Demographics for Each Participating School*

| School Demographics   | School A | School B | School C | School D | School E | School F | School G |
|-----------------------|----------|----------|----------|----------|----------|----------|----------|
| Number of students    | 838      | 639      | 842      | 1045     | 713      | 349      | 772      |
| Student/Teacher Ratio | 17.1 - 1 | 15.3 - 1 | 16.5 - 1 | 16.5 - 1 | 16.1 - 1 | 9.2 - 1  | 17 - 1   |
| Ethnicity             |          |          |          |          |          |          |          |
| Asian                 | 52.6%    | 41.9%    | 26.7%    | 66.2%    | 28.8%    | 24.1%    | 26.2%    |
| Caucasian             | 24.3%    | 36.9%    | 50.5%    | 20.5%    | 44.3%    | 30.1%    | 50.6%    |
| African-American      | 13.1%    | 10.6%    | 10.0%    | --       | 13.3%    | 36.1%    | 11.4%    |
| Two or more races     |          | --       | --       | 4.6%     | --       | --       | --       |
| Not Specified         |          | --       | --       | --       | --       | 36.1%    | --       |
| Other                 | 8.9%     | 10.6%    | 12.8%    | 8.7%     | 13.6%    | 9.7%     | 11.8%    |
| Free/Reduced Lunch    | 10.0%    | 13.5%    | 11.4%    | 3.3%     | 11.5%    | n/a      | 11.9%    |

The six teachers involved in the focus discussion had an average age of 46 years, and they had an average of 19 years of teaching experience.

Teacher 1 was a 62-year-old female and had 34 years of experience. She was the director of the school and expressed a wish to involve parents as much as possible in their children's education, but she also expressed reservations about having parents involved too much at the school.

Teacher 2 was a 52-year-old female with 18 years of experience. She specifically mentioned that students “spent their spare time on playing games, but not on reading.”

Teacher 3 was a 51-year-old female with 12 years of experience. She agreed that a “school can give more time to read.”

Teacher 4 was a 41-year-old female with 22 years of teaching experience. She mentioned that when children are young, parents should “give them the reading time” and when children are older, parents should allow children to “choose what they are interested (in) to read.”

Teacher 5 was a 39-year-old female with 10 years of experience. She mentioned early positive experiences and suggested that children liked “popular science books” and “natural science books.”

Teacher 6 was a 31-year-old female with 18 years of experience. She also talked about giving students a choice but said it should be “after they finish their homework.”

## **Results**

Results from the study have been separated into the three research sub-questions, which lead directly to the central question which will be answered in Chapter Five. Semi-structured interviews were conducted with 18 students from Smith Academy to discover themes related to their reading experiences both before they entered school and during school. Several themes emerged from the qualitative analysis. Second, a quantitative survey was administered to students to first help identify aliterate or struggling readers and then to corroborate the themes. Third, a focus group was conducted with teachers in order to find themes related to their teaching experiences concerning aliteracy.

### Sub-Question 1

The student interviews were conducted in a teacher workroom for minimal interruptions. The interviews were then transcribed, and the students were given the opportunity to correct or further clarify their answers. Then, using the NVivo computer analysis program, the researcher first used an open-coding system to identify possible themes from the students' comments (see Table 4).

Table 4

#### *Frequency of Codes and Students*

| Codes                               | # of Students | Frequency |
|-------------------------------------|---------------|-----------|
| Choice of books                     | 16            | 26        |
| Access to books                     | 14            | 26        |
| Time to read                        | 13            | 19        |
| Pleasurable reading experiences     | 12            | 19        |
| Favorite book identified            | 17            | 17        |
| Comic or graphic novels             | 8             | 15        |
| Reading suggestions                 | 12            | 14        |
| Fiction preference                  | 10            | 13        |
| Non-pleasurable reading experiences | 10            | 12        |
| Intrinsic motivation                | 10            | 11        |
| Homework interference               | 8             | 10        |
| Extrinsic motivation                | 6             | 9         |
| Reading is boring                   | 6             | 8         |
| Positive preschool experiences      | 7             | 8         |
| Quizzes/tests on books              | 5             | 7         |
| Positive home influences            | 4             | 4         |
| Reading out loud positive           | 2             | 4         |
| Text too difficult                  | 2             | 3         |
| Reading out loud negative           | 2             | 3         |
| Nonfiction preference               | 2             | 3         |
| Reading independently               | 2             | 2         |

Second, these themes were separated into either positive feelings/influences toward reading or negative feelings/influences toward reading, which further categorize the themes (see Table 5). This may help when constructing a reading program to help solve the problem of aliteracy at Smith Academy.

Table 5

*Positive or Negative Codes*

| Codes                               | Positive | Negative |
|-------------------------------------|----------|----------|
| Choice of books                     | X        |          |
| Access to books                     | X        |          |
| Time to read                        | X        |          |
| Pleasurable reading experiences     | X        |          |
| Favorite book identified            | X        |          |
| Comic or graphic novels             | X        |          |
| Reading suggestions                 | X        |          |
| Fiction preference                  | X        |          |
| Non-pleasurable reading experiences |          | X        |
| Intrinsic motivation                | X        |          |
| Homework interference               |          | X        |
| Extrinsic motivation                | X        |          |
| Reading is boring                   |          | X        |
| Positive preschool experiences      | X        |          |
| Quizzes/tests on books              |          | X        |
| Positive home influences            | X        |          |
| Reading out loud positive           | X        |          |
| Text too difficult                  |          | X        |
| Reading out loud negative           |          | X        |
| Nonfiction preference               | X        |          |
| Reading independently               | X        |          |

There are several themes that developed from these interviews that together may lead to a solution of the aliteracy problem at Smith Academy.

**Theme #1.** Choice of texts was extremely important to interest children in reading. As one student explained, “I think I like reading at school more because I get to choose the books I want to read, but at home my parents just kind of get the books that they want me to read.” Most of the students were able to choose their books at school, although two said they were not allowed to go the library and, thus, had less choice. Several suggested that the way to get students to read more books was to find books that the students would enjoy, thus, giving the students more choice: “get a book that has a topic that they’re interested in it” and “maybe they could read some books they like to read” and “[Teachers] might let him or her try out different types of books, so they can find what they like to read.”

**Theme #2.** Access to books, which is related to choice (if students do not have access to books, then they obviously have little choice in what they read), was also clearly important to the students. This was expressed in both positive ways, when the students mentioned the large numbers of books available to them both at school and at home, and in negative ways, when they discussed the lack of books that they actually wanted to read. One student answered a question about how many books she has at home by saying, “A lot. Only a handful I read because all of them are little baby books that my mom bought me to read when I was little and I was starting to get into reading.” Another student answered the question, “What do you think would encourage you to read more?” by saying, “If I had like a whole large selection of books that I like,” while another answered, “Maybe they could give me more books I like.” Another student responded to the question, “Are there a lot of books in [your classroom] that you want to read?” with “Not really because some of them, well, some of them I like, but some of them I just don’t feel like

reading.” Specifically when asked if there were books at home to read, one student said, “No, I’ve read a lot of them,” and another answered, “Pretty much I’ve read all of them.” Finally, one student explained that although there were books at home, she did not have ready access to them. When asked, “Do you have a lot of books at home?” she said,

Not that much because most of them are stored in my brother's room. And my brother's room is so messy. OK, because where all these books are, basically, there's like there's this whole mess over snacks, OK? They're all poured into his dirty clothes. And I have to go past there.

**Theme #3.** The third identifiable theme that emerged from the student interviews was the lack of time students were given to read, both at school and at home. Thirteen of the 18 students said they would read more if they had more time, either at home or at school. Several enthusiastically responded to the question of whether they would read more if they had more time, “Yes!” or “Yes, definitely!” One student explained, “If I had free time, I’d always want my dad to read a book to me . . . and I’d just snuggle with my mom and read, too, if I had extra time.” Others explained that too much homework interfered with their reading time. One said, “Except sometimes I don’t have enough time [to read]. I just have to do my homework,” while another explained, “I still have a lot of school homework and I don’t get to read,” and yet another student said, “Since I have a lot of work to do and stuff to catch up on, I don’t really get time to read.” And a last student explained that she does not read, “Because I don’t have as much time because I have to do my homework.”

**Theme #4.** Pleasurable reading experiences are one of the most important factors in whether children become an aliterate reader or not and are easily tied to the theme of having choice in what they read. The more choices they have, the more positive an experience they will



have. Positive reading experiences were expressed by several of the students, both at home and in the classroom. One student explained, “Sometimes my teacher reads to me when we’ve got snacks . . . And sometimes we can lay down on a pillow and read and we can use scoop chairs.” Having the use of a special scoop chair was echoed by another student. Students also explained that having a book they enjoyed because “the books are funny” or that they liked a book “because it’s silly,” lend credence to the idea that if a student enjoys a reading experience, then he or she is more likely to want to repeat it. Non-pleasurable reading experiences have as much an effect on students’ literacy outcomes. Several students mentioned that they were not allowed to read books outside of their reading level. One student explained, “In one bin, on the bookshelf, I’m really interested in [a book], but it says it isn’t my level . . . my teacher always catches me getting it, so I don’t have a chance to read it,” and another said, “Some books I want to read, but they’re lower than my reading level or higher” and she isn’t allowed to read them. A third student said that her teacher “tells us the type of books to read” and when asked if she likes those books responded, “Not really.”

### **Sub-Question 2**

The second sub-question for this study explored how a quantitative survey from students could inform the problem of aliteracy at Smith Academy located in central Georgia. Although mostly used to determine the more aliterate participants for the study, the quantitative survey does offer some possible themes to explore for designing a reading program. The Likert-scale, close-ended survey was administered individually to a total of 41 third-, fourth-, and fifth-grade students at Smith Academy as the schedule permitted. Much of the survey (Appendix F) is based on the Motivation to Read Profile-Revised (Malloy et al., 2013). The researcher administered the surveys and the 18 students selected were the most aliterate or reluctant readers.

Their individual answers are presented in Appendix K.

Answers ranged from one to four, with a one considered to be a more aliterate or reluctant reader and a four considered to be a less aliterate or reluctant reader. As can be seen in Appendix K, the scores ranged from a low of 2.22 (Questions 5 and 13) to a high of 3.5 (Question 6). The children's answers helped corroborate possible themes. The results were analyzed for possible themes or trends (see Table 6), which may lead to an explanation of their current attitudes toward reading and what may interest them more in reading.

Table 6

*Quantitative Survey Percent Deviations*

| Question | Mean | Percent Deviation |
|----------|------|-------------------|
| 1        | 3.06 | +18.3%            |
| 2        | 3.28 | +23.7%            |
| 3        | 3.11 | +19.6%            |
| 4        | 2.28 | - 9.6%            |
| 5        | 2.22 | -12.5%            |
| 6        | 3.5  | +28.5%            |
| 7        | 3.06 | +18.3%            |
| 8        | 3.44 | +27.3%            |
| 9        | 3.22 | +22.3%            |
| 10       | 3.17 | +21.1%            |
| 11       | 3.22 | +22.3%            |
| 12       | 2.56 | +2.3%             |
| 13       | 2.22 | -12.5%            |
| 14       | 3.11 | +19.6%            |
| 15       | 3.17 | +21.1%            |
| 16       | 3.33 | +24.9%            |
| 17       | 3.28 | +23.7%            |
| 18       | 2.78 | +10.0%            |
| 19       | 3    | +16.7%            |
| 20       | 3.06 | +18.3%            |

An average Likert score on the 20 questions was a 2.5, so examining the numbers significantly higher or lower may lead to a solution to the aliteracy problem at Smith Academy.

**Theme #1.** Talking about books with friends scored the lowest among the students, which is an indicator that they may be reluctant to demonstrate an interest in reading or are uncomfortable discussing books or simply have not read enough to discuss books at all.

**Theme #2.** Reading out loud also scored the lowest among the students, which may indicate a self-consciousness about peers listening to their poor reading or an indication that the students have not had enough practice with the skill to become comfortable.

**Theme #3.** The students scored the question about people who read a lot as being more interesting highest overall, which may offer teachers options for pointing out reading role models.

**Theme #4.** Becoming a good reader was rated second highest in importance by the students, which indicates that although they may not be that interested in reading, they realize the importance of being a good reader for their future.

### **Sub-Question 3**

The teacher's focus group session took place at the school after hours. The discussion was transcribed, and the teachers were given the opportunity to correct or further clarify their answers. Then, using the NVivo computer analysis program, the researcher used an open-coding system to identify possible themes from the six teachers' comments (see Table 7).

Table 7

*Frequency of Codes and Teachers*

| Codes                           | # of Teachers | Frequency |
|---------------------------------|---------------|-----------|
| Pleasurable reading experiences | 3             | 3         |
| Choice of books                 | 3             | 3         |
| Nonfiction books                | 3             | 3         |
| Time to read                    | 2             | 2         |
| Extrinsic motivation            | 2             | 2         |
| Importance of reading           | 2             | 2         |
| Book discussions                | 1             | 1         |
| Parents' involvement            | 1             | 1         |
| Technological distractions      | 1             | 1         |

Despite the limited amount of possible themes in the discussion, several are worth examining as they provide either supporting evidence of a specific theme or a disparate point of view from the students' perceptions. Several times, teachers agreed with others' statements, but those were not coded as additional frequencies.

**Theme #1.** The teachers agreed with the students that pleasurable reading experiences were particularly important to develop an overall positive reading attitude. As one teacher stated, "I do believe that reading books that he or she likes should be a good beginning of a child's reading," and another said that teachers should "choose some kinds of books [the children] like to guide them," emphasizing that students must get pleasure from a book in order to develop a reading habit.

**Theme #2.** Just as the students discussed, having a choice of books was important for the teachers in developing a student's positive reading habit. One teacher said that teachers should "allow them to choose what they are interested in reading" while another listed "story books,

comic books, popular science books” and other reading material so that children can have their choice of what to read.

**Theme #3.** The teachers listed having a large supply of nonfiction books available for the students as an important enticement in getting them to read. One teacher said that having “science and natural science” books would get more students to read, and another said that nonfiction “content is training them, and those [books] are the basic foundation.”

Three other items that the teachers mentioned were to get the parents involved in the reading program, that technological distractions, such as cell phones and iPads, were taking time away from reading, and that the use of extrinsic rewards, such as having a reading contest, could be employed to motivate students to read.

### **Discussion**

This study lends credence to several of the topics discussed in the literature section. Both students and teachers believed that having pleasurable reading experiences was vital to turn students into literate readers. As Ramsay (2002) noted, weak readers avoid reading, particularly as they receive no pleasure from reading. Whether that pleasure is provided by the school or at home, it is a necessary ingredient in turning an unwilling reader into a willing reader. Wilhelm and Smith (2014) and Moss and Young (2010) agreed that if students can be encouraged to find pleasure in their reading, then they are more likely to become successful readers and, as an added bonus, more likely to score higher on academic assessments.

Likewise, the idea of allowing children a choice in what they read is a crucial part of creating literate readers. Both the children and the teachers in the study concurred with the findings of many researchers (Fletcher, 2018; Fraumeni-McBride, 2017; Mackey, 2014; Merga, 2016; Neugebauer, 2013) that allowing children a choice in what they read makes their reading a

more pleasurable experience, which leads to more reading.

Offering children time to read was believed by the students to be highly valuable, but not mentioned by the teachers, who may feel more pressure to follow the curriculum that may not allow time to read during school. However, researchers such as Gallagher (2009), Kelley and Clausen-Grace (2010), Merga (2015, 2016), and Sanacore and Palumbo (2008) all laud the use of time during school towards independent reading.

Another area that the students in the study particularly valued was having access to texts that they actually want to read. Many of the students said they had books available at home, but at the same time, they said that too often the books available were not books they wanted to read. Students also said their teachers would not let them go to the library. Yet researchers, including Chambliss and McKillop (2000), Krashen et al. (2012), Sullivan and Brown (2015), and White and Kim (2010), all write about the positive effect of having access to books in both the classroom and the home.

Other topics covered in Chapter Two, including intrinsic and extrinsic motivation, early childhood literacy experiences, self-efficacy, volume of reading, and independent reading were all supported in various aspects by the study, though not as directly by the students' and teachers' own responses.

### **Summary**

The purpose of this study was to answer the question: How can the problem of aliteracy be solved at Smith Academy, located in central Georgia? Eighteen students were interviewed to understand their habits and feelings about reading and why they chose or did not choose to read. For Sub-question 1, "How would students in an interview solve the problem of aliteracy at Smith Academy located in central Georgia?", six third graders (two boys and four girls), six fourth

graders (two boys and two girls), and six fifth graders (two boys and four girls) gave various opinions that resulted in four definite themes to be categorized, including time to read, access to books of interest, choice of texts, and pleasurable reading experiences. From these themes were developed several different strategies that could be employed in order to raise the interest level of the students to help them become literate readers. For the second sub-question, “How would quantitative survey data inform the problem of aliteracy at Smith Academy located in central Georgia?”, a quantitative survey was administered to the students that helped first to identify those students who were most aliterate or struggled with reading and then to corroborate the findings in the qualitative data-collections, including the themes of discussing books with others, reading out-loud (as a negative), readers are more interesting, and reading importance. For Sub-question 3, “How would teachers in a focus group solve the problem of aliteracy at Smith Academy located in central Georgia?”, six teachers were involved in a qualitative discussion about aliteracy and both how they encountered aliteracy and how they could counter aliteracy. Their discussion led to three themes, including pleasurable reading experiences, choice of books, and nonfiction books (which the students mostly contradicted). Nevertheless, these themes could be useful to help combat aliteracy. The findings from this study were discussed relating to the literature and research, and the strategies that emerged from the various themes from this study will be enumerated and explained further in Chapter Five.

## **CHAPTER FIVE: CONCLUSION**

### **Overview**

The purpose of this applied study was to solve the problem of aliteracy for upper elementary students at Smith Academy in central Georgia and to formulate a solution to further address the problem. The problem guiding the study was that too many elementary children become aliterate readers due to various reasons by the time they leave elementary school. The rest of this chapter explains the steps necessary to solve the problem of aliteracy with a focus on the resources and funds required as well the responsibilities of those involved and the timeline that should be followed.

### **Restatement of the Problem**

The problem was that beginning elementary students who do not have a positive relationship with reading often become aliterate readers. With these students, elementary schools may neglect to establish a positive reading relationship early in their elementary career; thus, by the time the students finish elementary school, they have only been turned from being beginning, illiterate readers into below grade-level, aliterate readers. For some students at Smith Academy, an after-school program serving multiple elementary schools, aliteracy and reluctant reading is an identifiable characteristic. A multimethod approach was used to collect data regarding aliteracy and the reasons why it develops. Quantitative data from a survey was collected from 18 students identified as being either aliterate or reluctant readers. Interviews allowed the students to convey their feelings about reading and in what way their own reading habits and motivation could be modified. A qualitative focus group with teachers allowed the teachers to suggest possible ways to combat aliteracy. Together, these three approaches provided information about how aliteracy could be combatted at Smith Academy (see Figure 1).



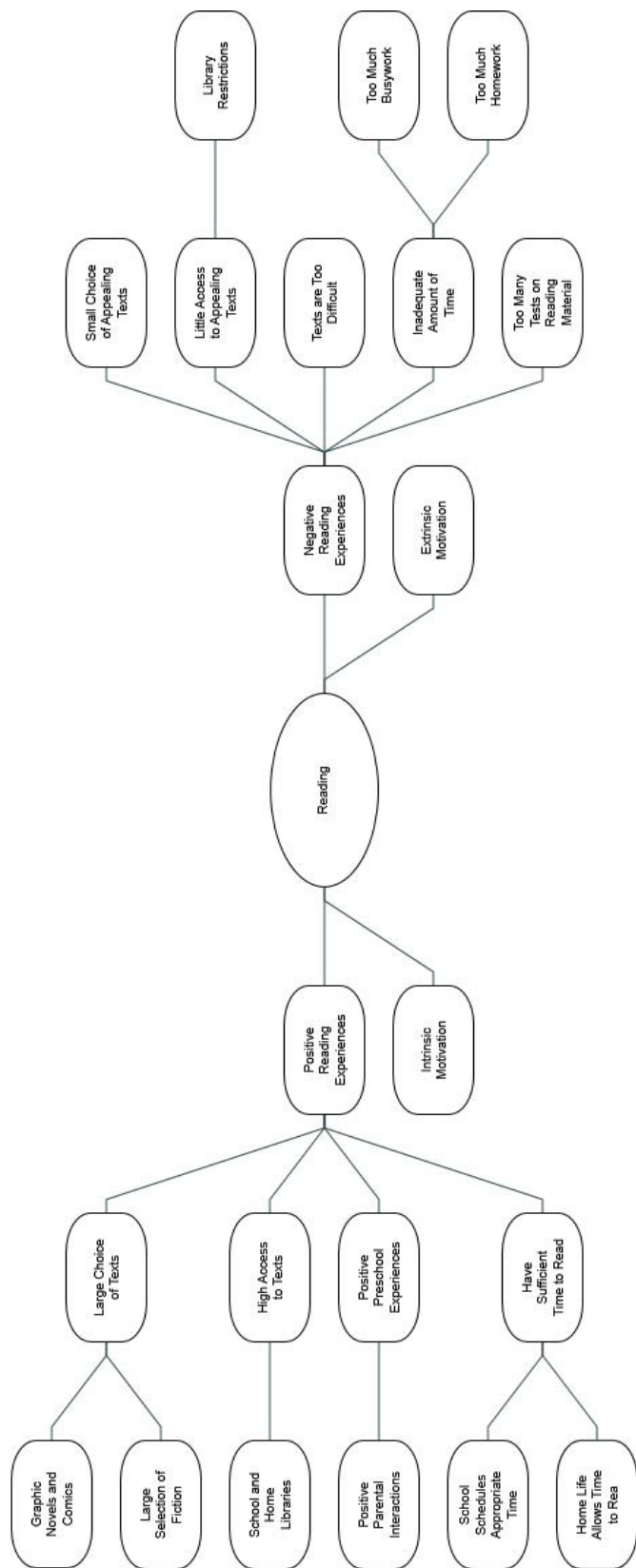


Figure 1. Proposed solution chart.

### **Proposed Solution to the Central Question**

The central question for the study asking how the problem of aliteracy can be solved at Smith Academy was answered by examining the themes that emerged from the study and involves several different strategies that are explained in the chart on the previous page (see Figure 1).

By focusing on the positive reading experiences, Smith Academy can turn their aliterate readers into literate, willing readers. By involving the parents, the students, and the teachers, Smith Academy students will all leave the fifth grade as involved readers. The first thing that would be done is to let everyone know what the goal is. Through a letter to parents and a brief discussion with the students, Smith Academy will ensure that everyone is aware of the process being undertaken. Then everyone can focus on attacking the problem together.

Two of the main themes that evolved from both the students and the teachers were that students must have access to books that they choose to read. Currently, Smith Academy provides very few books and expects their students to get books either from their school or their home, yet many students said the books they have available at either school or home are not books they want to read. Multiple researchers support the idea that students must have access to books that they want to read (Fletcher, 2018; Sikora et al., 2018; Sullivan & Brown, 2015). Allowing choice of texts is also an integral aspect of helping a child become a literate reader (Fraumeni-McBride, 2017; Mackey, 2014; Neugebauer, 2013). Therefore, the first and most important step is to provide books that the students want to read in the form of a school library, which currently does not exist. The International Reading Association recommended that there should be a minimum of seven books per student in the class, which equates to approximately 400 books (Fisher & Frey, 2018). As space is limited and most of the classrooms are used, the

library will be located in a classroom centrally located to all of the classrooms to allow easy access with the least interference. These books should be chosen with great care, ensuring that the students will want to read them. Students should be involved in selecting the majority of books, which will include a liberal helping of fiction and graphic novels. Parents and students will be asked to donate books to the library (as several students said, though they liked the books at home, they had also read all the books in their home). Then, books will be bought at used prices through the Internet or a used book store. Having a large choice of books that the students can access easily will be a large step in solving their aliteracy problem.

Second, students must be given time to read. Several Smith Academy students said they simply did not have adequate time to read, due to homework or extracurricular activities; therefore, Smith Academy must provide the time to read. Researchers agree that having the time to read can be a motivating force in getting children to read more books (Allington, 1983, 2013; Gallagher, 2009; Sanacore & Palumbo, 2008). Currently at Smith Academy, students are released from classes as soon as they have finished their work, and they either sit or play in the hall or, weather permitting, run outside. Now, students will be released from classes to go to the library to select a book to bring back to their classroom to read. This focus on reading will convey to the students that Smith Academy is serious about helping them reach their full potential.

The third step that will be undertaken will be the formation of a book club at Smith Academy. Pleasurable reading experiences were an identifiable theme for both students and teachers. By giving the students time to read and talk about their books with their peers, Smith Academy can enhance the reading experience by making it a social occasion. The creation of reading groups in a school can also positively increase student motivation to read (De Naeghel &

Van Keer, 2013). Parents will be informed regularly what the book will be, and once a month the students will be allowed to gather to talk about the book. This will be done as informally as possible to alleviate any pressure the students feel by too often being quizzed about their books.

Finally, parents will be asked to create pleasurable reading experiences with their children. This will be done in a variety of ways, including asking parents for food donations for the book club meetings, taking their children to the library, sharing their thoughts about their favorite books with their children, setting aside time to read with their children or setting time aside to specifically allow their children to read. One student summed up his feelings about reading with a parent by saying, "I just snuggle with my mom and read, too, if I had extra time." Convincing parents that they still play a vital role in their children's reading habits is a vital way to improve children's literacy.

### **Resources and Funds Needed**

The main resource needed to complete this transition is acquiring books that the students want to read. The first step is asking the parents and children to donate any books they have at home that they believe other students would want to read. Parents could be asked to donate money to acquire books. Smith Academy should also hold a book drive with a specific request for donations of children's books.

Finally, books will need to be bought through either the Internet or at used book stores in order to have an adequate choice of books for the students. This will amount to an outlay of less than \$1000. Though this may at first seem a potential barrier, it is also possible that the library can be assembled over time. Rather than be concerned about acquiring a certain number of books immediately, Smith Academy can start by acquiring as many as possible and build their library over time.

### **Roles and Responsibilities**

Fortunately, implementing this program would not require a great deal of time on behalf of the teachers or staff at the school. The school director should prepare a letter explaining to parents what is happening and ask for book donations. Teachers should ask students for suggestions of books. Collecting the books would require a box located where parents or children could place the donated books. Once books have been identified, buying books through the Internet or a used book store would require less than two hours of a staff member's time. Once the books were collected, the main role of the staff will be to facilitate allowing students to take advantage of opportunities to both go to the new library and to read.

### **Timeline**

The book project could be accomplished in a three-month timeframe (see Appendix J) from the introduction of the goal until students are actively engaged in reading using the new school library. Once the initial letter to parents is completed and the students are apprised of the goal, then book collection can commence immediately. Students should be surveyed for their book suggestions as soon as possible. After books are donated, the staff can complete purchasing any additional books.

### **Solution Implications**

The implications of the study are that students will become willing readers as long as they have books that they want to read. The positive impact of this is that they will develop a reading habit and thus avoid becoming aliterate readers. Sixteen of the 18 students interviewed said they would either read more or read a lot more if they were given time and choice of texts. It is well worth Smith Academy's time and money to implement the program as it could have a long-lasting effect on its students' academic outcomes.

Possible negative implications of the study are the cost of purchasing books. Teachers may also feel pressure by the students to allow them to go to the library before they have actually finished their classwork. It is also likely that books will be lost if the students are allowed to borrow books from the school library. These books should be replaced as time and money allow. However, the overall benefits of encouraging its reluctant readers to read will reap rewards for the Academy as well as for the individual students and their schools.

### **Evaluation Plan**

To evaluate the effectiveness of the implementation plan, the Smith Academy director should survey the students six months after the start of the program to discover whether their reading habits have improved or not. The quantitative reading survey used in this study will be used to compare the students' responses. Teachers should also be consulted about the number of times their students are taking advantage of books in the library.

Limitations of the study include the fact that the student sample was taken from a fairly affluent area and may not be representative of their specific elementary schools. Future studies would do well to focus on Title I elementary schools where aliteracy is a larger problem that needs addressing. However, providing students of any school access to books that they want to read would be a true step toward solving the elementary aliteracy problem.

### **Summary**

Aliteracy is a growing problem in the United States and worldwide, and any solution to the problem will provide a substantial improvement in the academic outcomes of some of its most challenged students: those students who are aliterate. Whether the aliteracy is caused by a lack of resources, poor parental influence, poor early reading experiences, technological distractions, or any other of many possible factors, elementary schools have the opportunity to

play a large role in combatting the problem to increase their students' academic success. By simply providing books that children want to read, elementary schools can improve their students' literacy and, as a byproduct that most elementary school administrators would applaud, improve their students' test scores as well. Smith Academy has the opportunity to greatly influence their most reluctant readers' futures, which will benefit each individual student as well as each individual's elementary school experience.

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## APPENDICES

## Appendix A: IRB Approval Form

# LIBERTY UNIVERSITY

INSTITUTIONAL REVIEW BOARD

February 4, 2020

B. Kirk Buis

IRB Approval 4054.020420: Aliteracy to Literacy: An Applied Research Study to Solve Elementary Readers' Aliteracy Problems

Dear B. Kirk Buis,

We are pleased to inform you that your study has been approved by the Liberty University IRB. This approval is extended to you for one year from the date provided above with your protocol number. If data collection proceeds past one year or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. The forms for these cases were attached to your approval email.

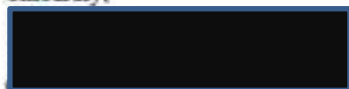
Your study falls under the expedited review category (45 CFR 46.110), which is applicable to specific, minimal risk studies and minor changes to approved studies for the following reason(s):

7. Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies. (NOTE: Some research in this category may be exempt from the HHS regulations for the protection of human subjects, [45 CFR 46.101\(b\)\(2\)](#) and (b)(3). This listing refers only to research that is not exempt.)

Your study involves surveying or interviewing minors, or it involves observing the public behavior of minors, and you will participate in the activities being observed.

Thank you for your cooperation with the IRB, and we wish you well with your research project.

Sincerely,



*Administrative Chair of Institutional Research*  
**Research Ethics Office**

**LIBERTY**  
 UNIVERSITY  
*Liberty University | Training Champions for Christ since 1971*

**Appendix B: Site Consent Form**

[REDACTED]

12/6/2019

June Flowers  
Director

[REDACTED]

Dear Kirk Buis:

After careful review of your research proposal entitled Aliteracy to Literacy: An Applied Research Study to Solve Elementary Readers' Aliteracy Problems, I have decided to grant you permission to conduct your study at [REDACTED]

- You will be allowed to survey the students for your quantitative data.
- You will be allowed to interview the students for your qualitative data.
- You will be allowed to hold a focus discussion with the teachers for your qualitative data.

Sincerely,

[REDACTED]

June Flowers  
Director

[REDACTED]

## Appendix C: Parental Consent Form

The Liberty University Institutional  
Review Board has approved  
this document for use from  
2/4/2020 to 2/3/2021  
Protocol # 4054.020420

### PARENT/GUARDIAN CONSENT FORM

#### ALITERACY TO LITERACY: AN APPLIED RESEARCH STUDY TO SOLVE ELEMENTARY READERS' ALITERACY PROBLEMS

This research study is being conducted by Kirk Buis, a doctoral candidate in the School of Education at Liberty University. Your child was selected as a possible participant because he/she is in the 3<sup>rd</sup>, 4<sup>th</sup>, or 5<sup>th</sup> grade and has been identified by a survey as being alliterate (students who can read but do not choose to read), reluctant to read, or reading below grade level. Please read this form and ask any questions you may have before agreeing to allow him or her to be in the study.

*Why is this study being done?*

The purpose of this study is to help solve the problem of upper elementary students who are capable of reading but who choose not to read.

*What will my child/student be asked to do?*

If you agree to allow your child to be in this study, he or she will be asked to do the following things:

1. Take a brief, 20-question survey about his or her reading attitudes and habits.
2. If selected, complete an interview with the researcher about his or her reading attitudes and habits. The interview will last for approximately 20 minutes and will be audio recorded.
3. Students will be asked to review their interview transcripts for accuracy. This will take approximately 30 minutes.

\*The researcher will randomly select 18 student participants (6 students from each participating grade level) to participate in the interview.

*What are the risks and benefits of this study?*

**Risks:** The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

**Benefits:** Your child should not expect to receive a direct benefit from taking part in this study.

Benefits to society include a possible increase in reading in other elementary schools' upper elementary students.

*Will my child be compensated for participating?*

Your child will not be compensated for participating in this study.

*How will my child's personal information be protected?*

The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify a subject. Research records will be stored securely and only the researcher will have access to the records.



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Protocol # 4054.020420

- Participants will be assigned a pseudonym. All the interviews will be conducted in a location where others will not easily overhear the conversation.
- All data will be stored on a password locked computer and may be used in future presentations. After three years, all electronic records will be deleted.
- Interviews will be recorded and transcribed. Recordings will be stored on a password locked computer for three years and then erased. Only the researcher will have access to these recordings.

*Is study participation voluntary?* Participation in this study is voluntary. Your decision whether or not to allow your child to participate will not affect his or her current or future relations with Liberty University. If you decide to allow your child to participate, he or she is free to not answer any question or withdraw at any time without affecting those relationships.

*What should I or my child do if I decide to withdraw him or her or if he or she decides to withdraw from the study?*

If you choose to withdraw your child or if your child chooses to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should your child choose to withdraw, any data collected from or about him or her will be destroyed immediately and will not be included in this study.

*Whom do I contact if my child or I have questions or problems?*

The researcher conducting this study is Kirk Buis. If you have questions now or later, you are encouraged to contact him at [REDACTED] or kbuis@liberty.edu. You may also contact the researcher's faculty chair, Dr. Pearson, at cpearson@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you are encouraged to contact the Institutional Review Board, 1971 University Blvd, Green Hall 2845, Lynchburg, VA 24515 or email at irb@liberty.edu.

*Please notify the researcher if you would like a copy of this information for your records.*

The researcher has my permission to audio-record my child as part of his or her participation in this study.

---

Signature of Parent

Date

---

Signature of Investigator

Date

## Appendix D: Student Assent Form

The Liberty University Institutional  
Review Board has approved  
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2/4/2020 to 2/3/2021  
Protocol # 4054.020420

### ASSENT OF CHILD TO PARTICIPATE IN A RESEARCH STUDY

**What is the name of the study and who is doing the study?**

Aliteracy to Literacy: An Applied Research Study to Solve Elementary Readers' Aliteracy Problems by Kirk Buis

**Why is he doing this study?**

Kirk Buis is interested in studying how to encourage upper elementary students who don't like to read.

**Why am I being asked to be in this study?**

You are being asked to be in this research study because you are an upper elementary student who can read but chooses not to, or you read below your grade level.

***If I decide to be in the study, what will happen and how long will it take?***

If you are in this study you will take a brief, 20 question survey and may be interviewed about your reading habits and reading attitudes. The survey will take about 20 minutes. The interview will take about 20 minutes and will be audio-recorded. You will be asked to read a transcript of your interview to make sure everything looks accurate. That will take about 30 minutes.

**Do I have to be in this study?**

No, you do not have to be in this study. If you want to be in this study, then tell the researcher. If you don't want to, it's OK to say no. The researcher will not be angry. You can say yes now and change your mind later. It's up to you.

**Do you have any questions?**

You can ask questions any time. You can ask now. You can ask later. You can talk to the researcher. If you do not understand something, please ask the researcher to explain it to you again.

Signing your name below means that you want to be in the study.

---

Signature of Child

Date

Kirk Buis

[kbuis@liberty.edu](mailto:kbuis@liberty.edu)

Dr. Constance Pearson (faculty chair)

[cpearson@liberty.edu](mailto:cpearson@liberty.edu)

Liberty University Institutional Review Board,  
1971 University Blvd, Green Hall 2845, Lynchburg, VA 24515  
or email at [irb@liberty.edu](mailto:irb@liberty.edu).

**Appendix E: Interview Questions/Guide for Students**

1. Would you please tell me how you feel about reading, both at school and at home?
2. Can you tell me why you like to read or tell me why you do not like to read?
3. What did you think about reading before you ever started school?
4. How did you learn to read?
5. How often do you read?
6. Do you remember a book that you liked or a favorite book? What was it and why did you like it?
7. If you like reading less now, why do you think that is?
8. Please tell me about reading at school. How often do you read? What does your teacher ask you to read? Are you able to choose what you read?
9. Tell me about reading at home. How often do you read at home? What do you read at home? What does your parent ask you to read?
10. Would you read more if you were given time during school or at home to read and if so, what would you want to read?
11. What types of books do you think you would like to read?
12. Do you have access to books that you want to read either at school or at home?
13. What would make you or other students like reading more?
14. Finally, there are 50 books on these racks. Could you pick out up to 10 books that you might be interested in reading?

### Appendix F: Quantitative Reading Survey

Student Name \_\_\_\_\_ Grade \_\_\_\_\_

Elementary School \_\_\_\_\_

Boy \_\_\_\_\_ Girl \_\_\_\_\_

1. My friends think I am

\_\_\_\_\_ a very good reader \_\_\_\_\_ a good reader \_\_\_\_\_ an OK reader \_\_\_\_\_ a poor reader

2. Reading a book is something I like to do

\_\_\_\_\_ never \_\_\_\_\_ almost never \_\_\_\_\_ sometimes \_\_\_\_\_ often

3. My friends think reading is

\_\_\_\_\_ really fun \_\_\_\_\_ fun \_\_\_\_\_ OK to do \_\_\_\_\_ no fun at all

4. I read

\_\_\_\_\_ not as well as my friends \_\_\_\_\_ about the same as my friends

\_\_\_\_\_ a little better than my friends \_\_\_\_\_ a lot better than my friends

5. I tell my friends about good books I read

\_\_\_\_\_ I never do this \_\_\_\_\_ I almost never do this

\_\_\_\_\_ I do this some of the time \_\_\_\_\_ I do this a lot

6. People who read a lot are

\_\_\_\_\_ very interesting \_\_\_\_\_ sort of interesting

\_\_\_\_\_ sort of boring \_\_\_\_\_ very boring

7. I am

\_\_\_\_\_ a poor reader \_\_\_\_\_ an OK reader \_\_\_\_\_ a good reader \_\_\_\_\_ a very good reader

8. I think becoming a good reader is

\_\_\_\_\_not very important                      \_\_\_\_\_sort of important

\_\_\_\_\_important                                      \_\_\_\_\_very important

9. I think spending time reading is

\_\_\_\_\_really boring    \_\_\_\_\_boring    \_\_\_\_\_great    \_\_\_\_\_really great

10. Reading is

\_\_\_\_\_very easy for me                      \_\_\_\_\_kind of easy for me

\_\_\_\_\_kind of hard for me                      \_\_\_\_\_very hard for me

11. When my teacher reads books out loud, I think it is

\_\_\_\_\_really great    \_\_\_\_\_great    \_\_\_\_\_boring    \_\_\_\_\_really boring

12. When I have free time, I spend

\_\_\_\_\_none of my time reading                      \_\_\_\_\_very little of my time reading

\_\_\_\_\_some of my time reading                      \_\_\_\_\_a lot of my time reading

13. When I read out loud, I am a

\_\_\_\_\_poor reader    \_\_\_\_\_OK reader    \_\_\_\_\_good reader    \_\_\_\_\_very good reader

14. If I were given time at my elementary school to read, I would

\_\_\_\_\_not read    \_\_\_\_\_read a little    \_\_\_\_\_read more    \_\_\_\_\_read a lot more

15. If I could choose what I read at my elementary school, I would

\_\_\_\_\_not read    \_\_\_\_\_read a little    \_\_\_\_\_read more    \_\_\_\_\_read a lot more

16. When someone gives me a book for a present,

\_\_\_\_\_I am very happy                      \_\_\_\_\_I am happy

\_\_\_\_\_I am unhappy                                      \_\_\_\_\_I am very unhappy

17. When I start a new book, I feel



\_\_\_\_\_very happy \_\_\_\_\_happy \_\_\_\_\_unhappy \_\_\_\_\_very unhappy

18. When I read my textbooks, I feel

\_\_\_\_\_very happy \_\_\_\_\_happy \_\_\_\_\_unhappy \_\_\_\_\_very unhappy

19. If I go to a library, I will usually

\_\_\_\_\_not find a book I like \_\_\_\_\_sometimes find a book I like

\_\_\_\_\_often find a book I like \_\_\_\_\_always find a book I like

20. If I could choose, I would read

\_\_\_\_\_not at all \_\_\_\_\_less than I do now

\_\_\_\_\_more than I do now \_\_\_\_\_a lot more than I do now

**Appendix G: Focus Group Questions/Guide for Teachers**

1. Are you familiar with the term aliteracy? It can mean either someone who is able to read but choose not to or someone who is a weak reader and avoids reading.
2. Do you have any students who you believe would qualify as aliterate readers? How would you describe them?
3. What ways have you tried to encourage your weaker readers to read more?
4. What kinds of books do you have available to students in your classroom?
5. How would you feel about offering your students time to read during school?
6. Can you think of any ways to get elementary students to read more?

## Appendix H: Teacher Consent Form

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Protocol # 4054.020420

### TEACHER CONSENT FORM

#### ALITERACY TO LITERACY: AN APPLIED RESEARCH STUDY TO SOLVE ELEMENTARY READERS' ALITERACY PROBLEMS

Kirk Buis  
Liberty University  
School of Education

You are invited to be in a research study on upper elementary aliteracy. It seeks to solve the problem of students who are capable of reading but choose not to. You were selected as a possible participant because you are 18 years of age or older and a 3<sup>rd</sup>, 4<sup>th</sup> or 5<sup>th</sup> grade teacher at the June Flowers Learning Center. Please read this form and ask any questions you may have before agreeing to be in the study.

Kirk Buis, a doctoral candidate in the School of Education at Liberty University, is conducting this study.

**Background Information:** The purpose of this study is to help solve the problem of upper elementary students who are capable of reading but choose not to read.

**Procedures:** If you agree to be in this study, I would ask you to do the following things:

1. Take part in a focus group discussion with other teachers about aliteracy and your ideas to solve the problem. This will take approximately one to two hours and will be recorded.
2. Participants will review their transcripts from the focus group and correct any inaccuracies. This will take approximately 30 minutes to complete.

**Risks:** The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

**Benefits:** Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society include a possible increase in reading in other elementary schools' upper elementary students.

**Compensation:** Teacher participants will be compensated for participating in this study. At the end of the study, you will be able to select high-interest books for your own classroom library. The value of the books is approximately \$35.

**Confidentiality:** The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records.

- Participants will be assigned a pseudonym. The focus group discussion will be conducted in a location where others will not easily overhear the conversation.

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Protocol # 4054.020420

- I cannot assure participants that other members of the focus group will not share what was discussed with persons outside of the group.
- All data will be stored on a password locked computer and may be used in future presentations. After three years, all electronic records will be deleted.
- The focus group will be recorded and transcribed. Recordings will be stored on a password locked computer for three years and then erased. Only the researcher will have access to these recordings.

**Voluntary Nature of the Study:** Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

**How to Withdraw from the Study:** If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you, apart from focus group data, will be destroyed immediately and will not be included in this study. Focus group data will not be destroyed, but your contributions to the focus group will not be included in the study if you choose to withdraw.

**Contacts and Questions:** The researcher conducting this study is Kirk Buis. You may ask any questions you have now. If you have questions later, you are encouraged to contact him at [REDACTED] or kbuis@liberty.edu. You may also contact the researcher's faculty chair, Dr. Pearson, at cpearson@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you are encouraged to contact the Institutional Review Board, 1971 University Blvd, Green Hall 2845, Lynchburg, VA 24515 or email at irb@liberty.edu.

*Please notify the researcher if you would like a copy of this information for your records.*

**Statement of Consent:** I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

The researcher has my permission to audio-record me as part of my participation in this study.

---

Signature of Participant

Date

---

Signature of Investigator

Date

### **Appendix I: Quantitative Survey Instructions for the Teacher**

Be sure that you have enough copies of the survey for all of your students. Please seat students so that their privacy is ensured. Have students clear their desktops. Distribute copies of the reading survey. Ask students to fill in the date on the line provided. Ask students to fill in the teacher's name on the line provided.

Please read each item two times aloud, even for higher grade levels. It's important that reading ability is not a complicating factor when responding to the items.

Please say, "I am going to read some sentences to you. I want to know how you feel about reading. There are no right or wrong answers because the response I really want to know is how YOU honestly feel about reading. Your answers will help me to make reading more interesting for you. I will read each sentence twice. Do not mark your answer until I tell you. You can mark your answer by checking the box that is your most honest answer. The first time I read the sentence, I want you to think about the question. The second time I read the sentence, I want you to fill in the space beside your best answer for each item. Be sure to mark only one answer. Remember: Do not mark your answer until I tell you. Are there any questions? OK, let's begin."

Monitor the class for understanding of directions.

Please say, "Let's practice listening and then marking with the first two items, A and B. Listen and follow along as I read Item A." [point to where Item A is on your copy].

Please say, "Remember-you're thinking, not marking yet. You're just thinking of what is right for you. I am in Grade 3, 4, or 5. Now, I will read it again, and you mark the best answer. I am in Grade 3, 4, or 5."

Check that students have marked their papers correctly and clearly. Demonstrate what a clear marking would look like if necessary. Read the second sample item the same way. Please say, “Now let's try Item B. I am a boy [pause] or a girl. Please think about the answer that is best for you. Remember, you're thinking and not reading. This time, when I read the sentence, mark the answer that is best for you. I am a boy [pause] or a girl. Are there any questions? [pause to answer questions]. Ok. Let's go on to item number 1.”

Each section requires about five minutes. Read the remainder of the items as above - first for thinking and the second time for marking.

Be sure to be clear about what item number you are on (in case students lose their place). Move around the classroom as you read the items to monitor understanding.

When all items have been administered, collect all of the answer forms, and the researcher will collect them at the end of the second day.

## **Appendix J: Timeline**

### **Timeline of Implementation of Aliteracy Prevention Plan**

- August 2020 – School Director sends letter to parents about reading plan.
- August 2020 – School Director and teachers discuss reading plan with students.
- August 2020 – Students’ book suggestions will be accepted.
- September 2020 – Books will be collected.
- October 2020 – Books will be purchased.
- November 2020 – Books will be placed in library.
- January 2021 – Students and teachers will be surveyed about reading plan’s success.



### Appendix K: Survey Responses

The individual student responses to each of the 20 survey questions are presented below.

The final row presents the mean score for each question; the final column presents the total score for each student.

| Student |      |      |      |      |      |     |      |      |      | Questions |      |      |      |      |      |      |      |      |    |      |    |  |
|---------|------|------|------|------|------|-----|------|------|------|-----------|------|------|------|------|------|------|------|------|----|------|----|--|
|         | 1    | 2    | 3    | 4    | 5    | 6   | 7    | 8    | 9    | 10        | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19 | 20   |    |  |
| 6       | 2    | 4    | 3    | 2    | 4    | 4   | 4    | 3    | 3    | 2         | 3    | 2    | 2    | 4    | 4    | 4    | 3    | 3    | 4  | 3    | 63 |  |
| 2       | 3    | 2    | 4    | 1    | 1    | 4   | 2    | 4    | 3    | 3         | 4    | 1    | 2    | 2    | 3    | 3    | 4    | 3    | 2  | 3    | 54 |  |
| 12      | 4    | 3    | 4    | 3    | 2    | 4   | 3    | 3    | 3    | 3         | 3    | 3    | 3    | 3    | 2    | 4    | 4    | 3    | 4  | 3    | 64 |  |
| 13      | 3    | 3    | 3    | 2    | 3    | 3   | 4    | 3    | 3    | 3         | 3    | 3    | 2    | 3    | 4    | 3    | 3    | 3    | 2  | 3    | 59 |  |
| 7       | 3    | 3    | 2    | 3    | 2    | 2   | 3    | 3    | 3    | 2         | 2    | 2    | 3    | 2    | 2    | 2    | 3    | 2    | 2  | 3    | 49 |  |
| 18      | 4    | 3    | 3    | 2    | 3    | 4   | 3    | 3    | 3    | 4         | 4    | 3    | 2    | 3    | 3    | 4    | 3    | 3    | 3  | 3    | 63 |  |
| 9       | 4    | 4    | 4    | 2    | 3    | 3   | 2    | 4    | 4    | 4         | 2    | 4    | 1    | 4    | 3    | 3    | 3    | 3    | 4  | 4    | 65 |  |
| 10      | 4    | 4    | 3    | 4    | 3    | 4   | 4    | 4    | 4    | 4         | 4    | 3    | 3    | 4    | 3    | 4    | 3    | 4    | 4  | 4    | 74 |  |
| 11      | 3    | 3    | 3    | 4    | 1    | 4   | 4    | 3    | 3    | 3         | 3    | 2    | 3    | 3    | 3    | 3    | 3    | 3    | 4  | 3    | 61 |  |
| 15      | 2    | 3    | 3    | 2    | 2    | 3   | 2    | 4    | 3    | 3         | 3    | 3    | 2    | 3    | 3    | 3    | 3    | 3    | 4  | 3    | 57 |  |
| 20      | 3    | 4    | 4    | 2    | 3    | 4   | 4    | 4    | 4    | 4         | 3    | 4    | 3    | 3    | 4    | 4    | 4    | 3    | 4  | 3    | 71 |  |
| 1       | 2    | 3    | 4    | 1    | 1    | 3   | 3    | 3    | 3    | 3         | 4    | 2    | 1    | 4    | 4    | 4    | 4    | 3    | 3  | 3    | 58 |  |
| 4       | 4    | 3    | 3    | 3    | 1    | 3   | 3    | 4    | 3    | 4         | 3    | 1    | 1    | 3    | 4    | 3    | 3    | 1    | 1  | 3    | 54 |  |
| 5       | 3    | 3    | 3    | 2    | 1    | 4   | 3    | 3    | 3    | 3         | 4    | 2    | 2    | 3    | 3    | 3    | 4    | 3    | 2  | 2    | 56 |  |
| 17      | 3    | 4    | 2    | 2    | 3    | 3   | 3    | 4    | 4    | 3         | 4    | 3    | 2    | 3    | 3    | 3    | 2    | 2    | 2  | 3    | 58 |  |
| 8       | 3    | 3    | 2    | 2    | 2    | 4   | 3    | 3    | 3    | 3         | 3    | 3    | 3    | 3    | 3    | 4    | 3    | 3    | 3  | 3    | 59 |  |
| 19      | 3    | 4    | 3    | 3    | 3    | 4   | 3    | 3    | 3    | 4         | 3    | 3    | 3    | 3    | 3    | 3    | 4    | 3    | 3  | 3    | 64 |  |
| 14      | 2    | 3    | 3    | 1    | 2    | 3   | 2    | 4    | 3    | 2         | 3    | 2    | 2    | 3    | 3    | 3    | 3    | 2    | 3  | 3    | 52 |  |
|         | 3.06 | 3.28 | 3.11 | 2.28 | 2.22 | 3.5 | 3.06 | 3.44 | 3.22 | 3.17      | 3.22 | 2.56 | 2.22 | 3.11 | 3.17 | 3.33 | 3.28 | 2.78 | 3  | 3.06 |    |  |