
Theses and Dissertations

2020

Best practices in student education: inspiring teachers to make a difference with students living in poverty

Andrea Steinfeld
andrea.steinfeld@pepperdine.edu

Follow this and additional works at: <https://digitalcommons.pepperdine.edu/etd>

 Part of the [Educational Leadership Commons](#)

Recommended Citation

Steinfeld, Andrea, "Best practices in student education: inspiring teachers to make a difference with students living in poverty" (2020). *Theses and Dissertations*. 1136.
<https://digitalcommons.pepperdine.edu/etd/1136>

This Dissertation is brought to you for free and open access by Pepperdine Digital Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of Pepperdine Digital Commons. For more information, please contact Katrina.Gallardo@pepperdine.edu, anna.speth@pepperdine.edu, linhgavin.do@pepperdine.edu.

Pepperdine University
Graduate School of Education and Psychology

BEST PRACTICES IN STUDENT ENGAGEMENT: INSPIRING TEACHERS TO MAKE A
DIFFERENCE WITH STUDENTS LIVING IN POVERTY

A dissertation submitted in partial satisfaction
of the requirements for the degree of
Doctor of Education in Organizational Leadership

by

Andrea Steinfeld

May, 2020

Farzin Madjidi, Ed.D. – Dissertation Chairperson

This dissertation, written by

Andrea Steinfeld

under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

Doctoral Committee:

Farzin Madjidi, Ed.D., Chairperson

Gabriella Miramontes, Ed.D., Co-Chair/Committee

Maria Brahme, Ed.D., Co-Chair/Committee

© Copyright by Andrea Steinfeld (2020)

All Rights Reserved

TABLE OF CONTENTS

	Page
LIST OF TABLES	vi
LIST OF FIGURES	vii
ACKNOWLEDGMENTS	viii
VITA.....	x
ABSTRACT.....	xi
Chapter 1: Introduction to the Study.....	1
Background.....	1
Three Dimensions of Student Engagement.....	3
Academic Achievement	6
Motivation and Academic Achievement	7
Statement of the Problem.....	9
Purpose Statement.....	10
Research Questions.....	10
Significance of the Study	11
Assumptions of the Study.....	13
Limitations of the Study.....	14
Definition of Terms.....	14
Chapter Summary	15
Chapter 2: Literature Review	17
Exemplary Teachers.....	17
Professional Development	24
Pedagogical Practices for Increasing Student Engagement	34
Technology and 21st Century Skills	51
Students in Poverty	59
The Consequences of Disengagement	64
Chapter Summary	68
Chapter 3: Research Design and Methodology	69
Restatement of Research Questions.....	69
Nature of the Study	70
Methodology	73
Research Design.....	76
Protection of Human Subjects	80
Data Collection	81
Interview Techniques.....	81

	Page
Interview Protocol.....	83
Statement of Personal Bias	88
Data Analysis	90
Chapter 3 Summary	91
 Chapter 4: Findings.....	 93
Participants.....	95
Data Collection	95
Data Analysis	96
Inter-Rater Review Process.....	97
Data Display.....	98
Research Question 1	98
Research Question 2	105
Research Question 3	113
Research Question 4	119
Chapter 4 Summary	127
 Chapter 5: Conclusions and Recommendations	 130
Summary of the Study	130
Discussion of Findings.....	132
Implications of the Study	142
Application.....	144
Study Conclusion	147
Recommendations for Future Research	148
Final Thoughts	148
 REFERENCES	 150
 APPENDIX A: Informed Consent.....	 184
APPENDIX B: IRB Approval Notice.....	186
APPENDIX C: Recruitment Script.....	187
APPENDIX D: Peer Reviewer Form.....	188
APPENDIX E: Permission from Skinner and Pitzer	190
APPENDIX F: Permission from the Director of Local District A (Pseudonym Used).....	191
APPENDIX G: CITI Completion Certificate	192

LIST OF TABLES

	Page
Table 1. Engagement and Disaffection.....	67
Table 2. Research Questions and Corresponding Interview Questions	85
Table 3. Research Questions and Corresponding Interview Questions (Revised)	87
Table 4. Dates of the Participant Interviews	96
Table 5. Summary of Themes for the Research Questions.....	128

LIST OF FIGURES

	Page
Figure 1. The notable terms defining student engagement	99
Figure 2. The notable terms referring to student engagement strategies	101
Figure 3. The notable terms referring to professional development	104
Figure 4. The notable terms referring to obstacles teachers face in engaging students	106
Figure 5. The notable terms referring to how the administration supports teachers with their obstacles	108
Figure 6. The notable terms referring to additional resources teachers need to feel better supported in increasing student engagement	110
Figure 7. The notable terms referring to how teachers measure success in developing student engagement strategies.....	114
Figure 8. The notable terms referring to how teachers track or monitor the level of engagement in the classroom.....	117
Figure 9. The notable terms referring to what successful strategies teachers employ to engage students living in poverty.	120
Figure 10. The notable terms referring to what additional advice teachers would to a novice teacher at a Title I school with regard to student engagement	123
Figure 11. The notable terms referring to anything else the participants wanted to add	125
Figure 12. Summary of the themes derived from the analysis of RQ1. The themes are presented in descending order.	132
Figure 13. Summary of the themes derived from the analysis of RQ2. The themes are presented in descending order.	136
Figure 14. Summary of the themes derived from the analysis of RQ3. The themes are presented in descending order.	138
Figure 15. Summary of the themes derived from the analysis of RQ4. The themes are presented in descending order.	140
Figure 16. PSEA2 (poverty, student engagement, and academic achievement). A training model developed by for best practices in engaging students in poverty.	144

ACKNOWLEDGMENTS

The path to this point in my life could not have been traveled without some very important people. To begin, my mother and father have instilled in me the value of education and that anything is possible when you have the determination and the willingness to work hard. Their generosity and support are always unwavering, and although I did not choose my parents or my family, I do count my blessings to have parents and sisters that imbue values, the love of family, and tradition. These values have contributed to the woman that I am today.

My husband. I did choose the perfect partner for me. His genuine support throughout this process has not been taken for granted. When I fell, he picked me up. When I needed to cry, he wiped my tears. When I needed to work, he gave me space. His unconditional support is the only reason I sit here today with a finished document. His belief in me is inspiring and our partnership is b'sherit.

My children. I am truly one of the luckiest mothers. I am blessed with two beautiful independent daughters who have been on the cheerleading squad alongside with my husband. On the sidelines, the three of them have been supplying the needed water and oxygen to help me finish the marathon, with grace. They have all embraced my passion for my work and for that, I am eternally grateful.

Dr. Candace Poindexter. Thank you for your belief in me 17 years ago and opening my door to higher education. Because our paths crossed, my educational journey changed, and for that, I am eternally grateful.

And lastly. My dissertation committee, Dr. Farzin Madjidi, Dr. Gabriella Miramontes, and Dr. Maria Brahme. Your encouragement, your guidance, your belief in me, have not only

made this dissertation possible, but also helped me create a body of research that I am passionate about. I am confident that good things are to come.

I am eternally grateful for many more. You know who you are! Each of you has been an integral part of this journey and thank you for taking the course with me.

VITA

EDUCATION

Pepperdine University, Malibu, CA <i>Doctoral Program, Organizational Leadership</i>	May 2020
Loyola Marymount University, Los Angeles, CA <i>Master of Arts, Child & Adolescent Literacy/Reading Certificate</i>	June 2003
California State University, Northridge, CA <i>Bachelor Degree, Child Development</i>	June 1984

CREDENTIALS

SB1969 <i>California Commission on Teacher Credentialing</i>	January 2000
Elementary Clear Credential <i>California Commission on Teacher Credentialing</i>	May 1985

MEMBERSHIPS

International Literacy Association	Ongoing
Kappa Delta Pi	May 2003
Reading Advisory Board, Loyola Marymount University	Ongoing

PROFESSIONAL HISTORY

Senior Lecturer, <i>Loyola Marymount University, Westchester, CA</i>	September 2003-Present
Intervention Coordinator, <i>Burton Elementary School, Panorama City, CA</i>	September 2009-Present
Reading Teacher, <i>Oxnard Elementary School, North Hollywood, CA</i>	July 2007-June 2009
Literacy Coach Advisor, <i>Oxnard Elementary School, North Hollywood, CA</i>	June 2000-June 2007

ABSTRACT

A large percentage of children enrolled in schools throughout the United States live in poverty. Therefore, educators across the country must develop education policies to ensure all children receive a high-quality education. To further support the need for education policy reform, the literature reviewed in this study indicated that students who live in poverty would have better outcomes when they are engaged in school behaviorally, affectively, and cognitively (Appleton, Christenson, & Furlong, 2008; Cai & Liem, 2017; Kelm & Connell, 2004). Moreover, professional development is necessary to provide teachers with pedagogical practices that will improve the educational practices of teachers, including cooperative learning, project-based learning, and preparing students to live in the 21st century.

A few of the key findings from this study revealed that the participants in this study do not have the theoretical framework for student engagement. Additionally, the participants are receiving a limited amount of professional development to support their knowledge for pedagogical practices for engaging students. Lastly, the participants stated that they face obstacles in engaging students; the obstacles align directly with the characteristics of students who live in poverty.

This qualitative study utilized the phenomenological approach; semi-structured interviews explored the experiences of teachers teaching in high-poverty schools. The results from the interviews are intended to inform educators of the benefits of engaging students who live in poverty and introduce a training model that can be utilized nationwide to provide teachers an opportunity to improve instructional practices and increase educational outcomes for all students, and more specifically, for students who live in poverty.

Chapter 1: Introduction to the Study

Background

School systems in America persistently fail to provide quality educational opportunities to students living in poverty, and the correlation between poverty and low educational achievement is significant (Connell, 1994; Hirn, Hollo, & Scott, 2018; Murnane, 2007). More specifically, the Public Policy Institute of California (PPIC) reported in January 2019 that half of the students in California are economically disadvantaged and that it is necessary to develop education reform policy that will decrease the achievement gap and increase funding to local districts (Hill, Gao, & Warren, 2019). Current research consistently links academic failure to behavior problems in school, and students who live in poverty exhibit behaviors that do not align with a positive learning environment, complicating the education process for students and teachers alike (Adamson, McKenna, & Mitchell, 2019; Begeny & Martens, 2006). To further illustrate the educational challenges related to poverty, children who experience poverty believe they cannot meet required educational expectations and do not believe they have the power to change their impoverished living conditions (Sheehan & Rall, 2011).

In 2017, the U.S. Census Bureau reported that 12.3% of the United States population and 20% of children lived in poverty (Hirn et al., 2018; U.S. Census Bureau, n.d.). Further data illustrates another challenge for teachers; according to the State Superintendent of Public Instruction in California, Tony Thurmond, for the 2018-2019 school year, 6,186,278 students were enrolled in public schools, and California had the highest percentage of students labeled English language learners ([ELLS]; California Department of Education, 2019). In addition to having large numbers of ELLs and socioeconomically disadvantaged students, teachers face a multitude of challenges, including behavior problems and teaching the Common Core State

Standards ([CCSS]; D'Angiulli, Siegel, & Maggi, 2004). Education advocates report a variety of challenges regarding the CCSS. For example, under the CCSS, students need to demonstrate a deeper understanding of curriculum; students are required to research and inquire about real-life conditions, collaborate, problem-solve, and communicate evidence in compelling ways (McLaughlin, Glaab, & Carrasco, 2014). To further illustrate these challenges, the school districts adopting the CCSS need to adjust curriculum, instructional practice, and assessment tools, and provide teachers with additional professional development to effectively implement instruction that is aligned with the more rigorous standards (Kober & Rentner, 2012). Furthermore, teachers are responsible for addressing students' social, behavioral, and academic issues that emerge in the classroom (Oldenburg, Bosman, & Veenstra, 2015).

In order to address the social, behavioral, and academic issues that occur in all classrooms, teachers should receive quality professional development on the best research-informed teaching practices that promote positive student behaviors (Kalinowski, Gronostaj, & Vock, 2019; Makovec, 2018; Miguel, 2019). The purpose of teaching is to influence students in their learning process, and although professional development does not provide teachers with all of the solutions to situational classroom issues, staff development does provide opportunities for critical reflection to benefit teaching practices (Rolheiser & Stevahn, 1998). Furthermore, research indicates that effective staff development is ongoing, is intellectually rigorous, and deepens educators' content knowledge (National Staff Development Council, 2001). Quality professional development will increase teachers' knowledge surrounding academic content, students' socialization, and behavioral issues that interrupt the learning process (Christie, 2009).

Student engagement that has the potential to reduce social and behavioral issues in school has become an important topic for psychologists, academics, and teachers alike (Carter, Reschly,

Lovelace, Appleton, & Thompson, 2012; Fredricks, Blumenfeld, & Paris, 2004). Student engagement refers to the “amount of time and effort students devote to activities that are empirically linked to desired outcomes” (Kuh, 2009, p. 683). Moreover, there is evidence that schools can influence engagement, and that engagement is a powerful predictor of grades, graduation rates, and test scores (Appleton, Christenson, & Furlong, 2008). Understanding engagement theory research in relationship to positive academic learning outcomes will support teachers in preventing social and behavior issues. Additionally, teachers who engage students will promote positive educational outcomes (Klem & Connell, 2004).

To further illustrate the correlation between academic achievement and student engagement, it is important to understand the three types of engagement: students’ feelings while learning, students’ behavior while engaging in learning activities, and students’ cognitive commitment (Cai & Liem, 2017). Although there are varying opinions regarding the dimensions of student engagement, Archambault and Dupéré (2016) have adopted the constructs proposed by Fredricks et al. (2004), agreeing that student engagement encompasses three dimensions: behavioral, affective, and cognitive.

Three Dimensions of Student Engagement

Behavioral engagement. Behavioral engagement is defined as a range of activities, including doing work or following rules, as well as students’ disposition when engaging in school-related tasks (Archambault & Dupéré, 2016; Fredricks et al., 2004). There are three distinct characteristics of behavioral engagement. The first characteristic focuses on student conduct, which includes following the norms and the rules of the school (Finn & Rock, 1997). The second characteristic considers engagement during learning academic tasks, including effort, tenacity, the ability to concentrate and pay attention, and interacting in class discussions (Birch

& Ladd, 1997). The last characteristic that defines behavioral engagement considers the extent to which a student is involved in school, such as participation in school-related activities like team sports or student council (Finn, Pannozzo, & Voelkl, 1995).

Affective engagement. Affective engagement represents how a student feels about school, including interests and attitude, as well as a perceived sense of belonging in the school climate (Finn, 1989). Additional research defines affective engagement as a student's interest level, including motivation and satisfaction, which establishes a commitment to school and learning (Groccia, 2018). Affective engagement also considers peer relationships and the importance of having close relationships with teachers, which fosters open communication (Birch & Ladd, 1997; Ruzek et al., 2016; Yang, Bear, & May, 2018). Students' positive outcomes in school are directly related to relationships within the school climate and attitudes toward school.

Cognitive engagement. Cognitive engagement encompasses self-regulatory strategies for students to organize and monitor their learning; researchers have defined cognitive engagement as a deliberate investment in learning (Ablard & Lipschultz, 1998; Fredricks et al., 2004; Pintrich & De Groot, 1990). According to Fredricks et al. (2004), cognitive engagement describes student investment in academic tasks, including the ability to commit to challenging tasks and grasp complex skills. Cognitive engagement also considers how students struggle to understand academic content (Rotgans et al., 2018). Students who are cognitively engaged in tasks employ a variety of tools to understand the content that influences academic achievement (Archambault & Dupéré, 2016; Rotgans et al., 2018).

Additional studies have found a correlation between academic achievement and student engagement. More specifically, Lei, Cui, and Zhou (2018) conducted a meta-analysis of 69

independent samples that attempted to establish a relationship between student engagement and academic achievement. The results revealed a higher level of “behavioral, emotional, and cognitive engagement associated with higher academic achievement” (p. 525). The research found a compelling relationship between behavioral engagement and academic success, indicating that the three types of engagement directly support academic success.

Likewise, Furrer and Skinner (2003) discussed theoretical, empirical, and realistic implications for relatedness in school as predictors of academic engagement and performance. They examined students’ academic motivation in relationship to relatedness using a sample size of 641 students in grades three through six. The study’s findings confirmed that relatedness is critical for academic performance, and when students feel connected or a sense of belonging, emotional and behavioral engagement increase. Additional findings from the research confirm that students who have a high degree of relatedness at the beginning of the school year significantly improve their performance over time. The research emphasizes the importance of relationships as a critical factor in predicting academic success.

To substantiate the importance of relatedness in school, Vidourek, King, Nabors, Bernard, and Murnan (2012) conducted a study analyzing school relatedness from the perspective of teachers to support the assumption that engagement prevents anti-social or risky behaviors in school. Surveys completed by 417 teachers revealed several benefits of school relatedness; 99.2% of the teachers felt that they could positively affect student’s lives, and two-thirds of the teachers stated that when students feel connected in school, violence and depression decrease. The study concluded that when the perceived benefits of relatedness in school improve, students have a better sense of self and academic achievement increases. It is evident

that when students feel connected to school, there are increased benefits, further validating the importance of teachers connecting to students.

In summary, the three dimensions of engagement provide a construct for analyzing student engagement and the importance of behavior, affective, and cognitive engagement interrelating to promote positive student outcomes in school. To understand the effects of student engagement, it is important to consider that “engagement is a multidimensional construct and argues for examining antecedents and consequences of behavior, emotion, and cognition simultaneously” (Fredricks et al., 2004, p. 61). Behavior engagement, affective engagement, and cognitive engagement can affect academic achievement.

Academic Achievement

Although historically academic achievement has been perceived as synonymous with a student’s aptitude, it is preferable to understand academic achievement as the result of interactions between students and their learning environment, and the results of these interactions can promote or hinder academic achievement (Lekwa, Reddy, & Shernoff, 2019; Rivkin, Hanushek, & Kain, 2005; Rockoff, 2004; Wenglinsky, 2002). The learning environment encompasses curriculum for the students, the teacher’s practices, and the students’ behaviors when learning (Lekwa et al., 2019). Further research confirms the importance of classroom conditions, or the learning environment, indicating that the quality of instruction and how the teacher groups the students influence students’ academic achievement (Downer, Rimm-Kaufman, & Pianta, 2007). Rockoff (2004) proposed that the key component of the learning environment is the classroom teacher; when students have quality teachers, it improves their academic achievement. To summarize, teachers and the methodology they employ directly influence academic achievement, and when teachers consider all three types of engagement—

behavioral, affective, and cognitive engagement—learning outcomes improve (Lekwa et al., 2019).

Motivation and Academic Achievement

In addition to the relationship between academic achievement and engagement, motivation is also critical for academic success (Moreira et al., 2018). Many students start their school career with an inherent need for competence and an enthusiasm to learn (Marks, 2000). Unfortunately, as some students get older, their motivation decreases, and they begin to question what motivates them to succeed (Marks, 2000; Pintrich, 2003). Furthermore, research distinguishes between motivation and engagement; motivation is the “underlying sources of energy, purpose, and durability” (Skinner & Pitzer, 2012, p. 22), whereas engagement focuses on the visible manifestation of those underlying sources (Skinner & Pitzer, 2012).

Accordingly, certain distinct behaviors illustrate student motivation. When students are self-perceptive, have self-efficacy, are goal-oriented, and are autonomous in the classroom, they are more likely to be motivated in school (Moreira et al., 2018). Similarly, motivated teachers spend more time with students, show emotional support and respect, and want to understand their students. Research has shown that students exhibit positive behaviors when they have a strong relationship with their teacher (Marks, 2000; Pintrich, 2003; Ruzek et al., 2016; Skinner & Pitzer, 2012). One characteristic, trust, is the foundation of the teacher-child relationship; students who trust their teachers will be more motivated to learn (Hamre & Pianta, 2001; Ruzek et al., 2016).

Moreover, motivated students exhibit specific behaviors that increase academic achievement; they put forth more effort toward academic tasks, show resilience when challenges occur, and persevere when solving problems (Lin-Siegler, Dweck, & Cohen, 2016). Pintrich

(2003) described these behaviors as social cognitive constructs and proposed five that are the focus of motivational research. The first construct addresses *self-efficacy*, which means that when students have high expectations, they tend to try hard and persevere, therefore enhancing their performance (Pintrich & Schunk, 2002).

The second construct, *adaptive attributions and control beliefs*, emphasizes that students who perceive that they have more control of the learning situation are likely to achieve at more advanced levels (Pintrich, 2003). *Higher levels of interest and intrinsic motivation* are the third construct. The learning environment fosters intrinsic motivation; when tasks are authentic, challenging, relevant, hands-on, heads-on (cognitively engaging), and integrated throughout the content area, and when they reflect student interest, students are intrinsically motivated to learn (Skinner & Pitzer, 2012). The next construct, *higher levels of value*, affirms that when students are responsible and concerned regarding the task, they have a propensity to be more motivated. The last construct, *goals motivate and direct students*, is a strong predictor of motivation and directs behavior in the classroom environment (Pintrich, 2003). It is evident that there are critical factors to consider regarding motivation because it directly affects student outcomes and intellectual success.

Furthermore, student engagement is a vital factor in academic achievement (Hirn et al., 2018). When students are challenged and motivated to learn, the likelihood of academic success increases (Carter et al., 2012). Although it can be challenging to engage students, it is critical to do so in order to improve student outcomes. Student engagement contributes significantly to students' sense of belonging and provides opportunities to improve cognitive skills; therefore, teachers need to implement pedagogical practices that promote student engagement (Lin-Siegler et al., 2017). Student engagement is not the only factor that will improve achievement, but

research indicates that when students are actively engaged, school becomes more relevant and students' chances of dropping out of school decrease (Appleton et al., 2008; Murnane, 2007; Woolley & Bowen, 2007).

Statement of the Problem

Children living in poverty typically attend low-performing schools whose staff are not prepared to teach a diverse student body (Clotfelter, Ladd, Vigdor, & Wheeler, 2007; Murnane, 2007; Valencia, 2015). Further research confirms that students living in poverty are “shortchanged on teacher effectiveness” (Valencia, 2015, p. 161) and that a “lack of access to qualified teachers constitutes a major threat to equal educational opportunity” (Darling-Hammond, 2004, p. 1937). To further substantiate the claim of education inequality in high poverty schools, in his book *Students of Color and the Achievement Gap*, Valencia (2015) proposed a connection between poorly qualified teachers and their limitations. These limitations contribute to poor academic outcomes for students, lending further support to the importance of having highly qualified and competent teachers in all classrooms, especially for students living in poverty.

To further illustrate the poverty crisis in the United States, in 2016, approximately 13.7 million U.S. children were living in poverty (McFarland et al., 2019). It is evident that a large percentage of children enrolled in schools throughout the United States live in poverty. Unfortunately, students of poverty enter school farther behind than students who are not poor and have higher chances of dropping out of school (Hughes, Cao, West, Allee Smith, & Cerda, 2017). All students, whether they are socioeconomically disadvantaged or not, should have the opportunity to succeed in school, and teacher practices should align with positive student outcomes (Lekwa et al., 2019; Sheehan & Ball, 2011).

Purpose Statement

There is a strong correlation between socioeconomic status and academic achievement; therefore, it is imperative to improve educational practice to support the diverse demographics of students in the United States. Jensen (2013a) advocated for making “classrooms relevant, engaging, and full of affirming relationships” (p. 3) to keep students in school and help them achieve significant academic success. Similarly, research indicates that when teachers increase teacher-to-student interactions and student-to-student interactions, students are more engaged, disruptive behaviors decrease, and student outcomes improve (Hirn et al., 2018). The present study was designed to explore the instructional practices of exemplary teachers to understand student engagement with students in poverty. Specifically, the purpose of this study was to determine:

- The challenges that teachers face in engaging students in poverty,
- The instructional strategies and practices that teachers can implement to facilitate students’ academic success,
- How the three dimensions of engagement provide a construct for analyzing academic achievement, and
- What recommendations exemplary teachers have for future teachers.

Research Questions

The study explored the following research questions.

- RQ1: What successful strategies are teachers using to support student engagement among low-income students?
- RQ2: What challenges do teachers encounter in increasing student engagement?

- RQ3: How do teachers measure success in developing student engagement strategies among low-income students?
- RQ4: What recommendations would teachers provide to incoming teachers to promote a high level of engagement among low-income students?

Significance of the Study

This study strove to deepen stakeholders' knowledge in the field of education and analyze best practices for teaching students in poverty. Schools receive additional funding for students who are economically disadvantaged or live in poverty. The passing of the Elementary and Secondary Education Act of 1965 (ESEA) mandated the distribution of Title I funds to school districts based on formulas that assess how many students are living in poverty (Murnane, 2007). It is legally mandated that schools use Title I funds constructively and commit to implementing highly engaging strategies that will support positive outcomes for students living in poverty.

To further address the needs of the economically disadvantaged student population in the United States, it is necessary to investigate best practices for student engagement, providing opportunities for optimal success. The available resources to help low-income families pay for preschool, gain access to acceptable public schools, and gain financial access to college are limited; therefore, it is essential to improve educational opportunities for students in poverty at every level of education, from preschool through higher education (Duncan & Magnuson, 2011). Underserved students deserve a quality education, and when teachers provide a caring learning environment with high expectations, the chances for school completion and higher test scores increase (Klem & Connell, 2004).

Accordingly, children are entering school with different skillsets. Students with lower socioeconomic status are “1.3 standard deviations lower than higher SES children in math skills, nearly two-thirds of a standard deviation below in attention skills, and one-fourth of a standard deviation worse in teacher-reported antisocial behavior” (Duncan & Magnuson, 2011, p. 48). The findings of this study are aimed at supporting principals, teachers, and students by providing a framework for implementing best practices for behavioral, affective, and cognitive engagement of students in poverty to improve positive educational outcomes.

Significance for principals. Principals are responsible for providing teachers with high-quality professional development that will influence the way teachers implement curriculum. Moreover, it is critical that principals are committed to learning and ensuring that the teachers at their schools employ current research-based strategies. Additionally, as instructional leaders at the school site, principals need to establish a positive learning environment for all stakeholders, ensuring that students receive high-quality instruction (Klem & Connell, 2004). Principals can use this study’s findings to improve teachers’ instructional practices.

Significance for teachers. The data support the assertion that many students come from households that are living in poverty (Hirn et al., 2018). Significant research on student engagement has revealed a direct correlation between student engagement and socioeconomic status. This study will deepen teachers’ knowledge about teaching students of poverty and provide best practices for student engagement. As a result, students’ behavior, motivation, and academic achievement will improve.

Significance for students. Careful examination of pedagogical practices for teachers working in high poverty neighborhoods will help to reduce school dropout and remediate students’ disengagement and lack of motivation in school. Moreover, the consequences of

students not engaging in their educational career can have a long-lasting negative impact on students' lives; the goal is to ensure students living in poverty receive a high-quality education to achieve optimal choices at the end of their educational career. This study will promote best practices for teachers, in turn benefiting students' behavior, feelings toward school, and cognitive abilities.

Significance for society. Student engagement can directly affect societal outcomes. Students who experience a connection to school are more engaged in the learning process, decreasing dropout rates. The research indicates a positive relationship between student active engagement in school and academic achievement. Jensen (2013a) confirmed that student engagement should be the core strategy to benefit students of low socioeconomic status. All students, especially those who live in poverty, need teachers who provide quality education and understand best practices in engaging students. The ultimate goal is to change students' educational outcomes, which will directly affect the structures of society.

Assumptions of the Study

The assumptions in this phenomenological study were as follows:

- The participants represent exemplary teachers in elementary school who are implementing best practices for student engagement.
- The participants were direct and honest in answering the interviewer's questions.
- The researcher had no inherent bias, and the questions were designed with the intent to understand the best practices utilized by the participants.
- There was no bias in interpreting the data and the researcher bracketed personal experience from the study (Creswell, 2018).

Limitations of the Study

There were inherent limitations to this study. It is important to acknowledge that this study did not answer all the questions surrounding student engagement. Further research will need to be conducted to explore a longitudinal effect, including student engagement in K-12 educational settings as well as higher education institutions.

Definition of Terms

The following terms are used frequently throughout this study.

- *Common Core State Standards (CCSS)*: The U.S. Department of Education (n.d.) defines standards as the goals for what students should learn. Additionally, 46 states, including the District of Columbia, are participating in the CCSS initiative. The goal of the standards is to prepare students to be college and career ready.
- *English Language Learners (ELLs)*: Students who are learning to communicate fluently in English and are typically from non-English speaking home environments (Great Schools Partnership, 2013).
- *Hands-on*: A term describing learning activities that are based on the constructivist philosophy wherein students are learning while doing.
- *Heads-on*: Students' ability to concentrate and focus on absorbing academic information, including a willingness to participate in learning activities and preferences for challenging work (Skinner & Pitzer, 2012).
- *Project-based learning* provides authentic activities that promote a deeper understanding of the content (Skinner & Pitzer, 2012).
- *Self-regulatory strategies*: Strategies students employ when learning that facilitate academic achievement. For example, when students organize information, provide

- intrinsic rewards or punishments to themselves, and review content by rereading notes, they are employing self-regulatory strategies (Ablard & Lipschultz, 1998).
- *Student engagement*: Engagement is multidimensional, involving emotion, behavior, and cognition (Fredricks et al., 2004). Furthermore, student engagement considers the amount of time students are on-task and learning academic content.
 - *Title I Schools*: Title I schools receive federal funds to supplement a school's budget; benefiting low-income students, and supporting students obtaining their educational goals.

Chapter Summary

Chapter 1 began with data illustrating the current school climate. A significant number of students are living in poverty nationwide, and in California, approximately half of all students are socioeconomically disadvantaged. In addition to teaching students living in poverty, teachers are challenged with increasing classroom demands, such as standards-based instruction, the need to raise test scores, and creating classroom environments that engage and motivate students and prevent school dropout.

Moreover, Chapter 1 discussed the three dimensions of student engagement. When students exhibit school-like behaviors—including following the norms of the school, concentrating in class, and participating in school-wide activities—engagement increases. A student's disposition and perceived sense of belonging or affective engagement also establish a deeper level of commitment to school and learning (Groccia, 2018). The last dimension of student engagement considers the cognitive activities that students employ to access content knowledge. Moreover, motivated students display behaviors that support academic achievement

and show resilience when challenged (Lin-Siegler et al., 2016). Student engagement is vital for achieving positive outcomes in school.

Chapter 1 also introduced the significance of professional development. Principals need to provide quality professional development to teachers in order to support the varying challenges related to engaging students living in poverty and institutionalizing school-wide behavior programs that will help students be safe at school. Principals are the instructional leaders at the school site, and it is critical for leaders to foster a learning community for all stakeholders, including teachers, parents, and students. Moreover, Chapter 1 included the purpose of the study, the research questions utilized to guide the research, and the significance of the study. This chapter concludes with the limitations and assumptions of the study and definitions of terms that will facilitate understanding of the study.

Chapter 2 will provide a literature review on best practices for student engagement. Chapter 3 will discuss the research methodology, research design, and data collection and analysis. Chapter 4 will present the findings, and Chapter 5 will conclude the study with recommendations to educators regarding best practices for engaging all students.

Chapter 2: Literature Review

It is challenging to define effective teaching, and the need for evidence-based research on effective or exemplary teachers is critical to improving educational outcomes. Allington (2002) confirmed that effective teachers are more important to student success than curriculum, asserting that expertise is a key contributor to students' achievement and educational needs. Moreover, the skills needed to teach will change continually in response to current research, and teachers must receive professional development in order to learn effective strategies that will improve student outcomes (Aldahmash, Alshamrani, Alshaya, & Alsarrani, 2019; Donnelly, 2003). Research findings indicate that exemplary teaching and the pedagogical decisions teachers make in engaging students living in poverty are vital to students' learning outcomes. Moreover, the specific characteristics of exemplary teachers—including enthusiasm for teaching, having a deep understanding of curriculum, and maintaining positive relationships with students—will produce better outcomes for students (Babbage, 2014; Gentry, Steenbergen-Hu, & Choi, 2011; Munns, Hatton, & Gilbert, 2013).

This literature review investigates the characteristics of exemplary teachers, effective professional development for teachers, the significance of pedagogical practices that support all students, and the relationship between technology and 21st century skills. In addition, the literature review addresses the characteristics of socioeconomically disadvantaged students and concludes by discussing the adverse effects of students' disengagement in school.

Exemplary Teachers

Exemplary teachers are influential in educating students and can change the trajectory of students' education (Devine, Fahie, & McGillicuddy, 2013, Taylor, 2002). Prior research has defined an effective or exemplary teacher and his/her characteristics that promote academic

success for all students (Allington, 2002; Duke, Cervetti, & Wise, 2016; Hativa, Barak, & Simhi, 2001; Taylor, 2002). Furthermore, summarizing the research that focuses specifically on effective teachers' characteristics and behaviors will provide a deeper understanding of pedagogical practices to support students living in poverty.

Personal characteristics of effective teachers. Cruickshank and Haefele (2001) described an effective teacher as exemplary, conscientious, detail-oriented, capable, contemplative, diversity-responsive, and respected. Further research suggests that outstanding teachers also recognize the importance of building relationships with students, including attending extracurricular events and demonstrating a passion for content knowledge and the teaching profession (Gentry et al., 2011). Stronge (2018) suggested that when considering the elements of an effective teacher, "the focus is on the whole person who brings to the classroom unique beliefs, values, attitudes, aspirations, motivation, knowledge, and skills, all rolled into one – the teacher" (p. 3). There are many characteristics of effective teachers; however, it is also necessary to consider the long-lasting impact teachers have on their students (Stronge, 2018).

To further illustrate teachers' influence on their students, a mixed-methodological study by Devine et al. (2013) analyzed a sample of six primary schools and six second level schools in Ireland. The 12 participating schools were diverse in terms of gender and social class. In addition, 126 teachers were observed, interviewed, and given a questionnaire encompassing 65 items categorized under teaching style, personal traits, differentiation, professionalism, and student-teacher relationships. A 7-point Likert scale was used, and five factors using Eigenvalues scores greater than 1 were identified. The results of the study indicated that exemplary teachers exhibit the following five factors: (a) having a passion for teaching and learning, (b) possessing social and moral dimensions (i.e., modeling positive conduct in the classroom), (c) being a

reflective practitioner, (d) being effective at planning and managing learning, and (e) having a love or passion for children and the ability to connect with students (Devine et al., 2013). This research study confirmed the characteristics of effective teachers suggested by Cruickshank and Haefele (2001) and Gentry et al. (2011), as mentioned previously.

Furthermore, Benekos's (2016) study emphasized that effective college-level teachers respect their students, are enthusiastic about teaching, have high expectations for students, are professional, and have a love of learning themselves. The study further revealed that effective teachers are passionate, engaging, and self-aware. The study aligns with the findings of Gentry et al. (2011), confirming that effective teachers build relationships with students and are not only enthusiastic about teaching, but also have a passion for educating students.

Similarly, Haberman (2018) considered six qualities that "star" (p. 6) teachers *do not* possess that exemplify characteristics of exemplary teachers. The first characteristic is that star teachers are indifferent regarding discipline. Haberman described three reasons for the indifference: (a) star teachers understand that problems are part of teaching, and highly effective teachers are needed to teach students who are affected by poverty or challenging home environments; (b) star teachers structure the classroom activities around engaging interactions, thereby preventing discipline issues; and (c) star teachers understand that students have varying abilities and behaviors, and do not assign work that students cannot accomplish. Furthermore, star teachers involve students in creating meaningful assignments.

The second characteristic that Haberman (2018) discussed is that star teachers do not punish. Haberman concluded that punishments are ineffective. Instead, norms established by the class promote justice and equity within the classroom community. When star teachers create a

“form of shared governance between the teacher and the class” (Haberman, 2018, p. 23), they circumvent the need for a punishment type system.

Homework is a widely discussed topic in research today; research findings indicate that there are minimal academic benefits for students assigned additional schoolwork to complete at home (Haberman, 2018; Marzano & Pickering, 2007). Thus, the third characteristic of star teachers is that they do not assign homework. However, they find alternative approaches; students plan what they need to do at home based on the classroom activities of the day (Haberman, 2018).

The fourth characteristic is that star teachers do not “parent bash” (Haberman, 2018, p. 24) or blame parents for their children’s lack of intelligence or bad behavior and are willing to visit families, regardless of the type of neighborhood in which they live. In contrast, star teachers desire to learn about the family and find ways to include parents, ensuring that parents are partners in their children’s academic career (Haberman, 2018).

According to Haberman (2018), the fifth characteristic of star teachers is that they spend minimal time on testing and grading and are more focused on effort, striving for students to achieve their potential. The Kentucky Department of Education (2017) has supported the idea of minimal testing, emphasizing that the purpose of assessment should be to revise teaching practices to help students understand the academic content. Additionally, Devine et al. (2013) noted that giving assessments was not a teaching priority; however, planning and managing learning were characteristics of effective teachers.

Aligning with the findings from Allington (2002), the sixth characteristic of star teachers suggests that they spend a significant amount of time on task, developing meaningful assignments with students. Furthermore, Duke et al. (2016) confirmed that effective teachers

engage students in more academic tasks, and more importantly, students spent more time on those tasks. Allington further illustrated the importance of time spent on task, stating, “When stuff dominates instructional time, warning flags should go up” (p. 742). He defined *stuff* as the activities children are doing that are not directly related to academic learning (i.e., spending a lengthy amount of time on activating prior knowledge). Extended time on task is critical to becoming a proficient student.

The last characteristic that exemplifies star teachers is that they do not consider using extrinsic rewards to reinforce behaviors. Haberman (2018) concluded that star teachers find it more effective when students are intrinsically motivated and make an internal commitment to learning. Ryan and Deci (2000) stated that “perhaps there is no single phenomenon that reflects the positive potential of human nature as much as intrinsic motivation” (p. 70), confirming that when students are intrinsically motivated, it increases their capacity to explore and learn.

Effective teaching strategies. The National Education Association published a report titled *Characteristics of Teachers who are Effective in Teaching All Children to Read* (Taylor, 2002), which concluded that effective teachers provide instructional balance between skills and strategies, provide opportunities for challenging discussions based on content, have coaching-focused classrooms where students receive feedback, and encourage self-regulating strategies that promote independent learning. Taylor (2002) further indicated that effective teachers design instruction that motivates students, develop active engagement activities, and have high expectations for students. Moreover, effective teachers serve as facilitators in establishing classroom rules with their students. They also work to build trusting relationships with their students’ parents by communicating student progress to them regularly, and by encouraging

parents to visit the classroom (Devine et al., 2013; Duta, Tomoaica, & Panisoara, 2015; Gentry et al., 2011; Haberman, 2018; Taylor, 2002).

In addition to designing instruction that motivates and actively engages students, the Kentucky Department of Education (2017) created teams to establish specific characteristics of effective teaching. The teams identified “five factors necessary for effective teaching and learning which include learning climate, classroom assessment and reflection, instructional rigor and student engagement, instructional relevance, and knowledge of content” (p. 1). The first factor to exemplify effective teaching involves the teacher establishing a learning environment where students are motivated, that nurtures mutual respect, that provides opportunities for collaborative activities, and that engages students. The second factor that illustrates effective teaching involves the teacher being able to revise instructional strategies by analyzing assessments and providing timely feedback to students. Next, effective teaching includes instructional rigor; teachers scaffold instruction to help students develop problem-solving skills, create meaningful and challenging learning opportunities, and integrate a variety of resources to engage students. Moreover, instructional relevance is critical, and when teachers design learning experiences in which mistakes are part of the learning process, it creates an optimal learning environment. To conclude, effective teachers have in-depth knowledge of content and understand how to teach the content, attend ongoing professional development, teach to the standards, and have a repertoire of instructional tools and strategies (Kentucky Department of Education, 2017), further supporting the findings of the research conducted by Benekos (2016), Devine et al. (2013), Gentry et al. (2011), and Haberman (2018).

Allington (2002) further noted that students are more engaged when teachers foster student-to-student and teacher-to-student discussions. Babbage’s (2014) study elaborated on this

finding, stating that effective teachers challenge not only themselves but also students by utilizing various strategies such as discussion to emphasize active engagement. Additionally, effective teachers are passionate and reassuring, and connect learning with students' current life perspectives. Hativa et al.'s (2001) study explained that effective teachers have complex and high-level views about teaching (including reasoning and decision-making skills) and use schemas for effective teaching.

In 2016 and 2017, Duke et al. concluded that exemplary teachers do not waste time, have clear routines, teach at a brisk pace, and provide engaging lessons that support on-task behavior, aligning with the research results obtained by Allington (2002) and Haberman (2018). Furthermore, Duke et al.'s (2016, 2017) findings suggest that exemplary teachers also make extensive use of small group, whole group, and individualized one-on-one support to help students engage effectively with content. Additionally, exemplary teachers teach equitably, modulating instruction based on the students' needs to achieve academic success, substantiating the importance of not wasting time, and establishing clear routines to support students' needs. Allington (2002) used data from a 10-year study that observed first and fourth-grade teachers and concluded that exemplary teachers spent up to 90% of the day teaching on task, used appropriate texts, and applied active instruction pedagogy, establishing the significance of continued research in verifying specific characteristics of effective teaching.

The literature reviewed thus far indicated that highly effective or exemplary teachers create learning environments where students are engaged actively in challenging tasks, and where there is mutual respect and trust between the teacher and the student (Allington, 2002; Devine et al., 2013; Duke et al., 2016, 2017; Duta et al., 2015; Gentry et al., 2011; Haberman, 2018; Taylor, 2002). To further summarize the characteristics of effective teachers, they are

influential and have the potential to create long-lasting impact on students' lives, they are passionate, and they motivate students to engage actively in school (Devine et al., 2013; Duke et al., 2016, 2017; Kentucky Department of Education, 2017; Stronge, 2018; Taylor, 2002). This study will benefit leadership teams at school sites by helping them understand the characteristics of exemplary teachers and their impact on engaging students in poverty.

Professional Development

In 2018 in the United States, 3.2 million full-time teachers were teaching in public schools, and .5 million were teaching in private schools, educating a total of 56.6 million students (National Center for Educational Statistics, Institute of Education Sciences, n.d.a). A substantial body of research indicates that teacher professional development can improve the quality of education, which would directly affect 56.6 million students' educational outcomes each year (Christie, 2009; Desimone, 2011; Edwards et al., 2019; Makovec, 2018; Wassermann, 2009). Understanding what successful professional development is and the necessary components thereof will further support and develop exemplary teachers.

Professional development is defined as intentional, systematic learning opportunities for teachers to change their behavior, shift their principles, and utilize new teaching techniques to benefit students' outcomes (Kalinowski et al., 2019; Kirkpatrick & Kirkpatrick, 2007; Wassermann, 2009). Additional research further defines professional development as opportunities for teachers to acquire and refine pedagogical practice to become better educators (Abramovich & Miedijensky, 2019; Phillips, 2008). Furthermore, Miguel (2019) proposed that the goal of professional development is to teach strategies that increase teachers' knowledge, capabilities, and effectiveness in teaching, shifting teaching practices to improve academic achievement for students.

Professional development can be delivered in various forms, including university classes, conferences, workshops, online, or on-site programs to provide teachers with tools necessary to improve instruction (Dunst & Raab, 2010; Parsons et al., 2019; Wasserman & Migdal, 2019). The delivery is one consideration when designing professional development. Desimone (2011) suggested that useful professional development should be social, interactive, and focused on content and how to deliver the content to ensure students' understanding of the curriculum. Desimone further explained that when teachers are engaged actively in activities such as observing, being observed, or analyzing student work, professional development is more effective. Furthermore, Desimone recommended that professional development align with district, state, and federal policies, and that the duration should be at least 20 hours or more per year, noting that professional development is more effective when teachers work in teams and build community.

Beijaard, Verloop, and Vermunt (2000) identified three specific areas in which teachers need to be experts: content, pedagogy, and didacticism. These areas support the idea that professional development can prepare teachers to understand the subject matter and learn instructional strategies that improve student outcomes (Abramovich & Miedijensky, 2019; Desimone, 2011; Phillips, 2008; Wasserman & Migdal, 2019). To further illustrate teachers' roles in becoming experts, Hirsch and Killion (2009) concluded that "principles, or powerful beliefs that underlie actions, are essential to sustained system and school improvement" (p. 465). Additionally, successful improvements are associated with learning, directly affecting educators and students. To further illustrate the importance of successful improvements and sustaining school improvement, Hirsch and Killion emphasized eight principles to drive transformational instructional practices further to improve student learning:

- Principles affect ideas, discussions, and actions. For transformation to occur, there must be open communication. It is essential for leaders to trust their team and lead with integrity, ensuring teachers feel safe to experiment with new ideas during professional development and focus on becoming better educators.
- Diversity enhances an organization and strengthens the results. Diversity needs to be incorporated into professional development, deepening the collaborative experience among the participants. Diversity includes race, gender orientation, socioeconomic status, ethnicity, family structure, and language. Leaders need to make decisions about professional development, which will incorporate diverse thinking and discussions that integrate varying perspectives and practices.
- Leaders need to foster competence at the school site, helping team members to lead and learn. In order for transformation to occur, leaders need to commit to providing support to teachers, ensuring that they have the knowledge and skills to create change. Leaders need to develop teams that take the initiative to make educational decisions, building the capacity of all members of the organization.
- Results happen when leaders have large-scale goals. It is imperative to have substantial goals, accountability, and high expectations for accomplishing the objectives set forth.
- Professional development needs to stay focused on learning. Schools improve when educators focus and work together to achieve academic success for students.
- Evaluation will improve results. It is critical that professional development is evaluated during the process to ensure that educators' knowledge and behaviors are changing to improve student success.

- School communities need to utilize teacher expertise. Sharing the staff's knowledge and expertise benefits the students. Professional development is a collective process; everyone learns from each other.
- Collaboration facilitates responsibility for developing student learning. When educators work together, sharing ideas and planning lessons, students benefit.

The eight principles suggested by Hirsch and Killion (2009) further support the research conducted by Abramovich and Miedijensky (2019), confirming the importance of professional development to help teachers become better educators and build teacher expertise. Furthermore, professional development increases knowledge and capabilities, and when school site leaders establish large-scale goals, foster competence and a willingness to incorporate diversity, adopt collaboration practices, and develop open communication policies, professional development will improve the quality of teaching at the school, further enhancing teacher expertise (Dunst & Raab, 2010; Miguel, 2019; Parsons et al., 2019). Similarly, Makovec (2018) emphasized the importance of teachers committing to personal and professional growth, lending support to the principle that professional development needs to stay focused on learning and committed focus produces long-term results (Hirsch & Killion, 2009).

Professional development has a powerful influence on teaching practices that benefit students' academic success. Moreover, Learning Forward (2019), a professional organization committed to professional development, supports educators in developing and implementing quality professional learning opportunities for schools to influence positive, long-term change for students' academic success. Learning Forward's mission, which aligns with Hirsch and Killion's (2009) philosophy, articulates five key beliefs regarding professional development:

1. For students to learn, teachers must receive professional development that develops their effectiveness.
2. Teachers are obligated to improve their teaching practice.
3. Students will succeed academically when teachers have collective ownership for students' learning.
4. Competent leaders build a climate where learning is incorporated and sustained.
5. School systems dedicate continual learning opportunities for all stakeholders (Learning Forward, 2019).

Professional development helps improve the quality of education. Systematically increasing educators' knowledge benefits the students they teach.

Models of professional development. Two different models of professional development align with the aforementioned eight principles proposed by Hirsch and Killion (2009) and the beliefs of Learning Forward (2019). The AAA program and Pisgah centers can guide school leaders to connect theory to effective classroom practice.

AAA professional development. Tanguay, Bhatnagar, Barker, and Many (2018) developed a framework for professional development in teacher preparation programs that include: “(a) awareness, (b) action, and (c) alignment” (p. 89). Known as the AAA program, this framework embraces the philosophy that in order for teachers to have an impact on schools with learners from diverse ethnic, cultural, and socioeconomic backgrounds, they need to know the content and have an understanding of diversity and the intrinsic relationship between learning and teaching (Milner, 2010).

Awareness. The first component addresses the importance of teachers developing self-awareness, including an awareness of bias and mindset, both of which influence curricular

decisions (Jennings, 2007). Awareness also focuses on new teachers “developing cultural and sociolinguistic consciousness” (Tanguay et al., 2018, p. 90). Thus, professional development needs to “include specific topics on cultural, linguistic, and racial diversity” (p. 90).

Sociolinguistics is the study of language, including social factors such as gender and socioeconomic status. Furthermore, Tanguay et al.’s (2018) findings confirmed that faculty members of teacher preparation programs need support to include awareness regarding topics of diversity. Faculty should participate in professional development to understand their beliefs and biases that might diminish the effectiveness of multicultural teacher preparation programs (Assaf, Garza, & Battle, 2010).

Action. The second component of the AAA framework established by Tanguay et al. (2018) is action, which emphasizes the importance of teacher educators having the knowledge and aptitude to demonstrate effective practices for teaching diverse students successfully. Action also includes preparing preservice teachers for educating ELLs, planning for instruction, modeling differentiation techniques, and understanding the different levels of language proficiency. Santangelo and Tomlinson’s (2012) study emphasized the need for teacher candidates to have faculty members model differentiation strategies that translate theory into classroom practice. Likewise, action incorporates the importance of mentorship; mentors can guide new teachers toward an equitable education approach, supporting differentiated instructional practice (Achinstein & Athanases, 2005).

Alignment. The last component of the AAA framework is alignment. Studies have demonstrated that alignment occurs when all stakeholders—including faculty and mentor teachers—have similar goals (Keehn & Martinez, 2006; Téllez, 2008). Tanguay et al. (2018) concluded that when there is congruence between program goals, pedagogical practices improve.

Applying the AAA professional development framework is essential to improving educational practices. The aforementioned eight principles suggested by Hirsch and Killion's (2009) study illustrate the importance of diversity, professional learning, team building, and high standards for the teaching profession. Leaders at the school site need to develop cultural and pedagogical awareness by engaging in conversations and creating opportunities to read and reflect upon current research (Tanguay et al., 2018). Furthermore, effective leaders maintain a culture that inspires teachers to learn and ensure that training aligns with state and district standards. Moreover, Learning Forward (2019) emphasizes the importance of high-quality professional development to improve instructional practices, because when teachers are aware, take action, and align instruction with standards, students' results improve (Tanguay et al., 2018).

Pisgah centers. The second professional development model confirms the importance and primary purpose of professional development: providing teachers with tools and skills to increase their knowledge and benefit students (Wasserman & Migdal, 2019). In Israel, the Ministry of Education's Department for Teaching Staff Development has established staff development centers known as *Pisgah* (summit) centers that are responsible for delivering professional development to teachers. Continuity is a fundamental principle guiding the centers' philosophy. The centers' purpose is to provide continued learning, increase knowledge, and establish teachers' professional skills. The professional development programs offered at the Pisgah centers include seminars, discussion groups, and training programs to deepen teachers' pedagogical practice (Wasserman & Migdal, 2019). The centers also offer ongoing support to teachers and informal classroom observations to improve teaching skills.

Currently in the United States, funding for teacher learning programs has been focused on minimally effective professional development models, i.e., “short-term workshops that research suggests are unlikely to influence teaching practice and student outcomes” (Wei, Darling-Hammond, & Adamson, 2010, p. 1). In their report, *Professional Development in the United States: Trends and Challenges*, Wei et al. (2010) discussed qualities of professional development that would be more effective in improving teacher knowledge and practice and yielding better student outcomes. The results in the report align with the Pisgah center model, confirming that professional development needs to:

- Provide teachers with specific content and pedagogy to teach effectively;
- Align with standards;
- Engage in active learning pedagogy;
- Offer continual, intensive support;
- Use assessment to inform teaching and learning;
- Use coaching and observation for feedback; and
- Establish collaborative learning communities (Wei et al., 2010).

Both models for professional development—AAA and the Pisgah centers—suggest critical components for successful professional development. Awareness of current research, active learning by participants, alignment with standards, and continual guidance through a coaching model will positively affect teacher performance. Furthermore, both of these models correlate directly with the eight principles established by Hirsch and Killion (2009) and the beliefs articulated in Learning Forward’s (2019) professional development framework. It is necessary to measure the success of professional development in order to determine its effectiveness.

Measuring the effectiveness of professional development. Professional development is costly, and if policymakers or state leaders are going to fund professional development, they should ensure that such training will improve instructional practice (Christie, 2009; Wei et al., 2010). Additionally, policymakers demand that professional development be evaluated in order to measure its effectiveness (Christie, 2009). Kirkpatrick and Kirkpatrick (2007) developed a four-level process for evaluating training—reaction, learning, behavior, and results—to justify funding for training, or more importantly, determine how to enhance training programs for the future.

The first level, reaction, measures the participants' feedback regarding the training. In schools, teachers are often required to attend professional development, and positive reactions can correlate with learning (Kirkpatrick & Kirkpatrick, 2007). Kirkpatrick and Kirkpatrick (2007) recommended the following guidelines when creating a reaction sheet: (a) list eight to 15 elements needing feedback, (b) design a quantifiable form using a Likert scale, (c) conclude the reaction sheet with an open-ended question asking for comments, (d) make sure the reaction sheet is anonymous, and (e) aim for 100% participation. In short, utilizing reaction sheets and reading the comments can improve professional development.

Although it is necessary to measure participants' reactions, the organization National Staff Development Council (2001) developed a report, *Standards for Staff Development*, and considered that evaluation must also include measuring whether or not teachers acquire new skills, how the new information directly affects teaching and student learning, and lastly, how the professional development affected the culture of the school. To measure whether or not teachers acquire new skills, the second level of Kirkpatrick and Kirkpatrick's (2007) model, learning, is critical.

Accordingly, Kirkpatrick and Kirkpatrick (2007) defined learning as “the extent to which participants change attitudes, improve knowledge, or increase skill as a result of attending the training program” (p. 22). Kirkpatrick and Kirkpatrick recommended using pretest and posttest surveys because this is the most practical method to measure whether or not teachers improve knowledge and skills to increase student achievement. The guidelines when developing the pretest and posttest are as follows. The tests: (a) should address the objectives of the program ensuring that the information and skills were learned; (b) should be not be excessive in length, should use a variety of test items including “agree or disagree, true or false, multiple choice, or matching” (p. 49); and (c) should use appropriate language for the participants. Evaluations allow for constructive feedback and can enhance future trainings to improve high-quality instruction.

The third level, behavior, measures whether or not change has occurred (Kirkpatrick & Kirkpatrick, 2007). Since the goal of professional development is to modify teaching behavior, Kirkpatrick and Kirkpatrick (2007) discussed four conditions necessary for behavior change to occur. The first is the willingness or desire to change teaching practices. The second is that the teacher must learn the skills needed to improve instruction and implement the new strategies. The third condition is to conduct professional development in an encouraging, positive climate, motivating teachers to change. The last condition is that the teachers should be rewarded for improving their teaching practices. Although offering monetary rewards is challenging because of budget constraints, teachers can receive intrinsic rewards and recognition to acknowledge the improvement of instructional practice to benefit student outcomes.

The last level of Kirkpatrick and Kirkpatrick’s (2007) four-level evaluation model is results. Student achievement is often measured by standardized assessments, and when teachers

attend professional development to improve instruction, test scores are used to measure the results. Further research indicates the importance of evaluation; in 2009, Christie investigated 11 states using evaluation for professional development: Arkansas, Iowa, Maryland, New Mexico, Florida, Indiana, Montana, Maine, Wyoming, New Hampshire, and Oregon. More specifically, New Mexico, Florida, Maryland, and New Mexico have adopted the National Staff Development Council's standards for professional development, ensuring that high-quality professional development directly affects student achievement, and that evaluation methods are used to measure the overall effectiveness of professional development (Christie, 2009; Hirsh & Killion, 2009; Wei et al., 2010).

Professional development is critical in developing and supporting exemplary teachers, and the scope of this research will inform teachers about the standards for professional development and the importance of improving instructional practice. Furthermore, when professional development changes teachers' behavior, the potential for positive student outcomes increases for the 56.6 million students enrolled in schools across the United States (National Center for Educational Statistics, Institute of Education Sciences, n.d.a), directly affecting students in poverty. Teachers need to commit to continually refining their practice, aligning curriculum with standards, and improving pedagogical practice by participating in high-quality professional development (Abramovich & Miedjensky, 2019; Learning Forward, 2019; Phillips, 2008; Tanguay et al., 2018).

Pedagogical Practices for Increasing Student Engagement

Teachers face a variety of obstacles in teaching students with diverse needs, including academic challenges and socioeconomic factors that are inherent in all classrooms. Furthermore, exemplary teachers are concerned with adopting responsive pedagogy to teach culturally diverse

students and identifying strategies to close the achievement gap in schools (Finn & Rock, 1997; Hernandez, 2011; Hirn et al., 2018; Murnane, 2007; Santamaría, 2009). As a result, research indicates that the most effective teaching practices acknowledge all learners in the classroom community, and teaching practices need to integrate pedagogies that address the academic, socioeconomic, and cultural diversity that mirrors the diversity in our country and global society (Santamaría, 2009). This study discusses cooperative learning, project-based learning, motivation, and technology engagement to understand best pedagogical practices for all students and ultimately to increase student engagement with the potential of improving academic outcomes.

Cooperative Learning. Cooperative learning is a researched-based strategy defined as an active pedagogical practice in which students are working in mixed-level groups (students at varying ability levels) and all group members work to manage the learning in order to achieve a collective goal (Gillies, 2014; Johnson & Johnson, 1999; Nair & Sanai, 2018; Springer, Stanne, & Donovan, 1999). When group members work toward a common goal, the reciprocal relationship among the group members increases academic achievement and participation in more sophisticated discussions, decreasing interruptions when students make oral contributions (Gillies & Boyle, 2010; Herrmann, 2013). The point of cooperative learning is to promote cognition and socialization skills (Devi, Musthafa, & Gustine, 2015; Gillies & Boyle, 2010; Karacop & Diken, 2017). Research has identified significant benefits to implementing cooperative learning strategies in kindergarten through college-level classrooms (Gillies, 2014).

There is strong evidence documenting the social and academic benefits of cooperative learning activities (Devi et al., 2015; Emmer & Gerwels, 2002; Gillies, 2014; Gillies & Boyle, 2010; Johnson & Johnson, 2009; Raviv, Cohen, & Aflalo, 2017). The social benefits relate to

principles Vygotsky's (1978) principles indicating that when students are interacting socially with their peers, their cognitive understanding increases, and the social environment directly influences the learning process (Lange, Costley, & Han, 2016; Nair & Sanai, 2018; Neutzling, Pratt, & Parker, 2019). To further explain the importance of social interactions with peers, a specific concept developed by Vygotsky (1978), the Zone of Proximal Development (ZPD) illustrates the benefit of students working together. "When a state of disequilibrium may occur, cooperative-based learning can create the conditions for a zone to develop that allow the struggling learner to comprehend new information with the assistance of the facilitator or others in the group" (Clapper, 2015, p. 152). Positive relationships with group members must be in place in order for the zone to work effectively for all group members, and teaching students social skills can promote higher levels of achievement and positive relationships among group members (Clapper, 2015; Johnson & Johnson, 2009; Lange et al., 2016; Tsay & Brady, 2010). To further illustrate the benefits of cooperative learning and socialization, Gillies and Boyle (2010) stated that the classroom is a "far happier and more enjoyable place for the students to be" (p. 935) when students are working in cooperative groups, emphasizing that social and inter-group relationships develop in cooperative learning groups (Gillies, 2014).

Further research has confirmed the educational benefits of cooperative learning (Emmer & Gerwels, 2002; Hsiung, 2012). In a study conducted by Raviv et al. (2017), students perceived that cooperative learning benefited them by offering them an in-depth understanding of the content and a greater sense of satisfaction. Additional research established that when students are participating actively in group work, it has a positive relationship with students' academic success; moreover, the pedagogy behind cooperative learning is a strong predictor of academic performance (Gillies & Boyle, 2010; Tsay & Brady, 2010). As a result, when students

experience working cooperatively, struggling students improve academically and the collaborative experience promotes a positive attitude toward other students (Gillies, 2010). To summarize, the premise for the increase in academic performance is that “cooperative efforts are inherently more complex than individual efforts because groups members must concentrate on both taskwork and teamwork, whereas those working alone need concentrate only on taskwork” (Hsiung, 2012, p. 132). Cooperative learning promotes academic success for all group members.

In addition to the social and academic benefits, motivation increases for students when learning cooperatively as well (Devi et al., 2015; Gillies, 2014; Johnson & Johnson, 1999, Justice et al., 2007; Machermer & Crawford, 2007; Nair & Sanai, 2018; Swanson et al., 2017). Further research indicates that collaborative opportunities motivate and inspire students and have compelling effects on academic achievement, socialization, personal development, and motivation (Gillies, 2014; Nair & Sanai, 2018). Two types of motivation are considered when analyzing the benefits of cooperative learning: intrinsic and extrinsic motivation (Swanson et al., 2017). Cooperative learning improves intrinsic motivation; students inherently want to do well on assignments and assessments. Similarly, students are more extrinsically motivated when working in small groups and will put forth more effort to achieve in front of classmates (Swanson et al., 2017). Therefore, when students are responsible for another person’s success, they will be more motivated to work hard in a cooperative learning group (Neutzling et al., 2019; Swanson et al., 2017).

Student engagement also increases during cooperative learning (Emmer & Gerwels, 2002; Gillies, 2014; Gillies & Boyle, 2010; Herrmann, 2013; Johnson & Johnson, 2009; Neutzling et al., 2019; Swanson et al., 2017). To further illustrate the relationship between

cooperative learning and student engagement, Swanson et al. (2017) emphasized that cooperative learning improves student engagement, increases students' knowledge, and ultimately improves course grades, confirming the academic benefits of cooperative learning. Furthermore, embedding collaborative learning activities fosters student engagement by providing opportunities for open communication between teachers and students, promoting problem-solving strategies and cooperative investigation, and helping students feel supported and secure in the school environment (Gillies & Boyle, 2010; Johnson & Johnson, 2003; Roseth, Johnson, & Johnson, 2008).

Although cooperative learning has many benefits, social loafing is a concerning potential negative consequence of cooperative learning. In social loafing, "one or more students rely on the rest of the group to carry them" (Lange et al., 2016, p. 264). Social loafers tend to contribute little to the group's effort (Onwuegbuzie, Collins, & Jiao, 2009; Voyles, Bailey, & Durik, 2015). When educators are aware of this phenomenon, teachers can reduce social loafing and improve the group's overall effectiveness (Voyles et al., 2015). Researchers have identified several strategies to prevent social loafing during cooperative learning, including having enough tasks for all group members, incorporating student accountability, ensuring clarity among group members with regard to group goals, and making sure all members take responsibility for the outcome (Johnson & Johnson, 2009; Onwuegbuzie et al., 2009; Voyles et al., 2015). Further research recommends assessing students based on individual learning goals (which does not conflict with the principles of cooperative learning), as well as promoting group cohesion by utilizing smaller cooperative groups (Herrmann, 2013; Johnson & Johnson, 2009; Swanson et al., 2017). Students are less likely to participate in social loafing when teachers closely monitor

groups, ensuring collaboration and equal participation by all group members (Johnson & Johnson, 2009).

Types of cooperative learning. Three specific examples of cooperative learning (formal, informal, and base groupings) support the social and academic benefits of this practice, enhancing student motivation and engagement in academic tasks (Johnson & Johnson, 1999; Johnson, Johnson, & Holubec, 2008; Johnson & Johnson, 2009; Lange et al., 2016). In formal cooperative groupings, students work on tasks over extended periods to accomplish learning goals (Johnson & Johnson, 2009; Lange et al., 2016). Johnson et al. (2008) proposed that teachers employ specific strategies to support the successful implementation of formal groupings, including (a) deciding on the objectives of the particular lesson being taught, (b) clarifying the tasks that students will be learning, (c) observing and monitoring students while working cooperatively, and (d) assessing the performance of the learning groups. When the teacher's efforts support formal groupings, students will apply more effort to achieve (Johnson & Johnson, 1999).

In the second type of cooperative learning, informal, students are working for shorter periods (Lange et al., 2016; Tsay & Brady, 2010). Students are engaging in focused discussions ranging from 2-15 minutes throughout the lesson, strengthening their ability to cognitively process the academic content (Johnson & Johnson, 2009). Additionally, informal cooperative groupings support students retaining information (Tran & Lewis, 2012), and when students are participating actively, academic performance increases (Lange et al., 2016). Johnson and Johnson (2009) claimed that the purpose of informal groupings is for the students to focus on academic tasks, ensuring that "students cognitively process the material being taught" (p. 374).

The last type of cooperative learning is base groups. Base groups meet for more extended periods, and the heterogeneous groupings reinforce, encourage, and sustain academic progress and promote cognitive and social accountability (Johnson et al., 2008). Furthermore, base groups meet regularly during the academic year and have three to four members in each group. Members support each other with homework, academic tasks, and social or emotional problems that are commonly encountered in a school environment (Johnson & Johnson, 2009). Due to the long-term goals of the groupings, an additional benefit is that they provide the necessary structure for students to develop long-lasting peer relationships that influence consistent efforts to do well in school (Johnson & Johnson, 1999).

In brief, cooperative learning is gestalt in nature (i.e., the whole is more than the sum of its parts); on a regular instructional day, students will begin with a base group meeting to review homework or other academic tasks. The teacher will then provide a lesson implementing informal cooperative learning strategies. Following the lesson, the teacher will employ a formal type of cooperative group lesson, and toward the end of the day, the base groups reconvene, providing an opportunity to discuss the content learned (Johnson & Johnson, 2009).

Cooperative learning approaches. Cooperative learning approaches are useful in fostering interactions for students with different learning styles; when students have opportunities to contribute to group work by accomplishing tasks and sharing ideas, participation increases (Çolak, 2015; Devi et al., 2016). The instructional methods that teachers employ to assure deep learning and academic success for students are essential, and cooperative learning is becoming a dominant instructional pedagogy worldwide (Çolak, 2015; Johnson & Johnson, 2009). For this research, two approaches will be discussed: the jigsaw method and think-pair-share.

Jigsaw approach. Karacop and Diken (2017) described the jigsaw method as a teaching practice in which students have two specific responsibilities: learning the material and teaching the material to others. Kolanczyk and Arif (2017) explained the basic concepts of the jigsaw method thusly:

Learning material is divided into segments. Students are assigned one segment to learn as the “expert” and given adequate time to become familiar with their assignment. During class, students form “expert” groups with other students who were assigned the same material. The expert group discusses and teaches each other the main points of their assigned material before assembling into jigsaw groups. In the jigsaw groups, each student represents a different segment and teaches their fellow group members. (p. 2)

The goal of the jigsaw method is for each contributing member to understand his/her segment and teach the material clearly to other students; by becoming an active listeners and teachers, students are better able to retain the content being learned (Devi et al., 2015; Kolanczyk & Arif, 2017; Tran & Lewis, 2012). Analysis of several research studies suggests numerous benefits to the jigsaw method (Karacop & Diken, 2017; Kolanczyk & Arif, 2017; Phillips & Fusco, 2015; Tran & Lewis, 2012). Students show improved academic success when utilizing the jigsaw method and make significant gains in knowledge and skills (Karacop & Diken, 2017; Tran & Lewis, 2012). Furthermore, the variety of learning experiences increases participation, and when students have an opportunity to master content before teaching it to the jigsaw group, their confidence increases (Kolanczyk & Arif, 2017; Karacop & Diken, 2017). In addition to academic gains, students also develop a positive attitude toward learning (Tran & Lewis, 2012).

Think-pair-share. Think-pair-share (TPS) is a collaborative brainstorming strategy that provides students an opportunity to first think independently and then share with others

(Kaddoura, 2013; Li, Wu, & Lin, 2019; Rahayu & Suningsih, 2018). More specifically, Hamdan (2017) described each component of TPS. In the first step, the thinking step, the teacher poses a problem or a question related to a topic, and then gives students time to think independently to solve or answer the question. In the second step, the pairing step, two students are paired up and asked to exchange ideas to reach a common solution. The last step, the sharing step, has two options for implementation. Students can pair up with another couple or share their ideas with the whole class. As with the jigsaw method, there are many benefits to the TPS strategy.

TPS provides students with active opportunities to engage in learning activities and increases participation in academic tasks (Groccia, 2018; Hamdan, 2017; Kaddoura, 2013; Lange et al., 2016; Li et al., 2019). As a result of students having independent thinking time, students can process information at a deeper level (Hamdan, 2017). Furthermore, TPS promotes critical thinking and problem-solving skills by asking students to consider other points of view and inviting them to change their position upon consideration of further evidence (Devi et al., 2015; Hamden, 2017; Kaddoura, 2013). An additional benefit of TPS is that it develops communication skills, boosting learners' confidence and reducing their anxiety when answering questions (Hamden, 2017; Li et al., 2019). Both the jigsaw strategy and TPS are cooperative strategies that promote positive learning outcomes (Herrmann, 2013). This study will help teachers understand the implications of implementing cooperative learning strategies with all learners, therefore enhancing academic achievement for students in poverty.

Project-based learning. Project-based learning (PBL) or the inquiry approach is a pedagogical practice that offers a compelling way to cultivate students' interest in the learning process as a result of students solving authentic problems or real-world tasks and working on extended projects that facilitate collaborative learning (Balfanz, Bridgeland, Bruce, & Fox, 2012;

Bell, 2010; Blumenfeld et al., 1991; Chen & Yang, 2019; English & Kitsantas, 2013; Fifolt & Morgan, 2019; Gültekin, 2005; Panasan & Nuangchalem, 2010). In PBL, students are actively engaged in learning curriculum concepts through a project, deepening their understanding of the content and improving metacognitive skills by formulating plans and presenting their findings to an audience (Bell, 2010; Blumenfeld et al., 1991; Fifolt & Morgan, 2019). Students become researchers and problem-solvers, developing higher-order thinking skills (Gültekin, 2005). Additionally, PBL promotes 21st-century skills by sparking creativity, supporting a collaborative approach, and engaging students in critical thinking opportunities (U.S. Department of Education & Office of Technology, 2017).

Implementation of project-based learning. The research highlights a specific process for implementing PBL, which starts with a driving question that inspires the activities that the students will do and concludes with a final project that addresses the essential question (Blumenfeld et al., 1991). Student choice is fundamental for PBL, and with the teacher's support in structuring activities to increase motivation, students conduct research integrating reading, math, writing, science, and history to explore real-world situations (Bell, 2010; English & Kitsantas, 2013). Furthermore, students design their inquiry process, and by planning and organizing their research, they are incorporating a multitude of learning strategies, increasing their motivation to learn (Bell, 2010). During this initial phase of PBL, students receive feedback and guidance from the teacher to develop the driving question, make connections to previously learned information, and establish what the students need to know in order to be successful (English & Kitsantas, 2013; Mergendoller, Maxwell, & Bellisimo, 2006).

The next step in PBL is the inquiry phase. Students are researching during this phase, gathering information to solve the problems created by the driving question (English &

Kitsantas, 2013; Mergendoller et al., 2006). To conduct the research, students are utilizing information from the internet, books, videos, and guest speakers to develop insights surrounding the topic (English & Kitsantas, 2013) and establishing self-regulating strategies that engage them in the learning process metacognitively, motivationally, and behaviorally (Zimmerman, 1989). Students are developing responsibility, monitoring their progress, and focusing intently on researching information related to the goals, further cultivating self-regulated learning (Cantalini-Williams et al., 2015; Chen & Yang, 2019; Condliffe et al., 2017; Fifolt & Morgan, 2019). To conclude this phase of PBL, teachers offer students constructive feedback on their findings and students revise their work as necessary (English & Kitsantas, 2013).

During the last phase of PBL, students have an opportunity to share their project (English & Kitsantas, 2013). More specifically, Bell (2010) proposed that students select a specific target audience, “ranging from their peers, to the principal, to their parents” (p. 40), highlighting the importance of being accountable to an authentic audience. The benefits of this last phase of PBL is that students reflect on the learning goals and process, and when they share their project or findings, they “discuss the rationale, receive feedback, and compare their findings and processes to those of other students, as well as to standards” (English & Kitsantas, 2013, p. 143). Some examples of final projects include a public service announcement, a poster session, a pin-up session, or a gallery walk (English & Kitsantas, 2013; Kolodner et al., 2003). For example, a public service announcement might be a video bringing awareness to a specific problem (English & Kitsantas, 2013); a poster session would highlight the procedure, results, and interpretation of the results; and a pin-up session would include the students sharing the overall design and justification for the design decisions (Kolodner et al., 2003). Lastly, in a gallery walk, the students have an opportunity to “show off something they have constructed, focusing their

presentation on what they were trying to accomplish, and what they did to accomplish that” (Kolodner et al., 2003, p. 524). During the sharing phase, students continue to learn from their peers by observing how they approach a problem and by receiving feedback after the presentation (English & Kitsantas, 2013).

Although numerous benefits have been discussed in the previous section, it is vital to illustrate specific benefits of PBL. PBL is an approach that meets the CCSS’s goal of developing a comprehensive approach of students’ knowledge of subject matter disciplines (Blumenfeld et al., 1991; Polman, 2014). Additionally, students who are socially and academically engaged in school are more motivated in school, increasing their probability of graduating from high school (Balfanz et al., 2012; Bell, 2010; Revelle, 2019). More specifically, Fifolt and Morgan (2019), Bell (2010), and Revelle (2019) proposed that PBL benefits students from diverse backgrounds because it provides an opportunity for students to draw from their personal experiences and develop 21st century skills. It also helps students become “productive members of a global society” (Bell, 2010, p. 43). Similarly, PBL creates independent and critical thinkers and learners by giving students responsibility for their learning and the opportunity to solve complex problems (Bell, 2010; English & Kitsantas, 2013). PBL also increases academic success and helps students find learning more enjoyable (Gültekin, 2005).

Similar to cooperative learning, there are challenges to implementing PBL successfully. PBL requires teachers to shift their practices; they must change their perceptions of classroom control and let students have more ownership over their learning (Condliffe et al., 2017, Kolodner et al., 2003; Nariman & Chrispeels, 2015; Parsons, Metzger, Askew, & Carswell, 2010). More specifically, when implementing PBL pedagogy, it can be challenging for teachers to regulate students’ behavior, manage students’ ability to work collaboratively, and ensure all

students participate in group projects (Parsons et al., 2010; Wurdinger, Haar, Hugg, & Bezon, 2007). Additional challenges include the length of time it takes for teachers to plan and implement PBL; it also takes students longer to conduct their explorations and investigations (Ertmer & Simons, 2006; Hertzog, 2007; Revelle, 2019). Teachers have reported that they do not receive enough guidance and support for implementing PBL and it can be challenging to locate adequate materials and resources to support this practice (Blumenfeld et al., 1991; Ertmer & Simons, 2006; Parsons et al., 2010). The integration of technology is another challenge when implementing PBL; students do not have consistent access to technology, and some teachers need guidance on how to integrate technology into PBL effectively (Condliffe et al., 2017; Krajcik & Shin, 2014). Furthermore, accountability is challenging on two levels: ensuring students are successful on standardized assessment and covering the required curriculum in an academic year (Bell, 2010; Revelle, 2019).

To conclude the discussion on PBL, six specific recommendations suggested by Kokotaski, Menzies, and Wiggins (2016) will help teachers and students receive the optimum benefits of this pedagogical practice. The first recommendation is to support students and ensure that they have time management skills, self-management skills, and the ability to integrate technological resources appropriately. The second recommendation is the consideration for teacher support. Professional development and support from school leadership are essential for teachers to implement PBL effectively. The third suggestion emphasizes the importance of effective group work and of students sharing the workload equally, preventing social loafing. The fourth recommendation is balancing teacher instruction and student inquiry in order for students to develop knowledge and skills to engage in independent activities effectively. The fifth suggestion is that teachers monitor student work regularly, and the last recommendation is

that students have choice and autonomy throughout the learning process. PBL is an engaging methodology and the scope of this research supports teachers implementing cooperative learning and PBL with students living in poverty. Accordingly, “the importance of classrooms encouraging high levels of student engagement in challenging contexts cannot be overstated” (Munns et al., 2013, p. 35), and motivating students to learn is equally important.

Motivation. Motivation is defined by a student’s predisposition, desire, and willingness to participate in the learning process (Petre, 2017). Additional research indicates that a student’s desire to learn correlates directly with motivation and achieving positive educational outcomes (Lin-Siegler et al., 2016; Pintrich, 2003). Research conducted by Bolkan, Goodboy, and Kelsey (2015) further established that students’ motivation is associated directly with learning and connecting student motivation to learning will yield positive outcomes. Furthermore, when teachers engage in several different behaviors to encourage student motivation, learning is relevant, students’ academic needs are being met, and learning becomes intellectually stimulating (Bolkan et al., 2015; Pintrich, 2003; Ryan & Deci, 2000). As a result, motivation is vital in producing positive academic outcomes; therefore, teachers and parents need to understand how students become motivated in school to achieve the best results (Ryan & Deci, 2000).

Research studies confirm that specific teacher behaviors increase student motivation (Ben-Eliyahu & Kaplan, 2015; Jones & Skaggs, 2016; Ryan & Deci, 2000; Schraw & Lehman, 2001; Siegle, McCoach, & Roberts, 2017; Skinner, Pitzer, & Steele, 2016). One behavior that correlates directly with student motivation occurs when teachers establish interest in students, further developing affective engagement, a sense of belonging in the school community, and a commitment to school and learning (Birch & Ladd, 1997; Bolkan et al., 2015; Finn, 1989;

Groccia, 2018; Ruzek et al., 2016; Schraw, Flowerday, & Lehman, 2001). Schraw (2001) discussed a specific teacher behavior, choosing text with the organization in mind, ultimately increasing student interest and motivation to learn.

The first element of text organization that increases students' motivation and interest in school is the coherence of text. The text should be easy to understand; in contrast, when text is challenging, or students do not understand the material, they are more likely to be unmotivated (Pintrich, 2003; Schraw et al., 2001). The second element that Schraw et al. (2001) proposed is that text needs to be relevant and vivid; accordingly, when students can connect with the reading material, or interpret the text as exciting and suspenseful, motivation increases. Further research supports the third element of text organization; students should have a say in choosing a text. When students can choose reading material and academic tasks, it is beneficial to the students' learning process. Findings confirm that when teachers provide appropriate text and offer students text choice, motivation increases, especially for students who have shown a lack of interest in learning or little motivation in school (Park, Gunderson, Tsukayama, Levine, & Beilock, 2016; Schraw et al., 2001; Siegle et al., 2017).

The research conducted by Jones and Skaggs (2016) further addresses the importance of teacher behaviors in relationship to student motivation. Jones and Skaggs present a conceptual framework—empowerment, usefulness, success, interest, and caring (MUSIC)—to help teachers understand motivation. The empowerment component addresses the extent to which students feel they have control over their learning, including the ability to make decisions and choices in the learning process. This component is consistent with feelings of autonomy (Jones & Skaggs, 2016; Ryan & Deci, 2000). Empowerment further validates the findings of research conducted by Schraw et al. (2001) and Park et al. (2016), which emphasize the importance of teaching

behaviors that connect student choice with motivation and empowering students to have control over the learning process. Another component of the framework, usefulness, addresses students' perception of the relevancy of classwork, further confirming that relevant classrooms are more engaging, and when teaching behaviors can connect learning to relevant experiences, students' effort in school improves (Jensen, 2013a, 2013b). Additional evidence suggests that when teachers offer learning tasks that are relevant, students are intrinsically motivated and cognitively engaged with academic learning (Ablard & Lipschultz, 1998; Bolkan et al., 2015; Fredricks et al., 2004; Pintrich & De Groot, 1990; Pintrich, 2003; Ryan & Deci, 2000; Skinner & Pitzer, 2012).

Success, the next component of the conceptual framework, illustrates an essential aspect of whether students will be or feel motivated to learn (Jones & Skaggs, 2016). A substantial body of research confirms the relationship between success and motivation (Gehlbach et al., 2016; Jones & Skaggs, 2016; Lin-Siegel et al., 2016; Pintrich, 2003; Siegle et al., 2017; Skinner et al., 2016). More specifically, students accomplish tasks when they are motivated to learn; therefore, success correlates with affective engagement, which includes feelings of self-worth. Long-term success is associated with students being interested in learning, and when students have positive relationships with peers and their teachers, motivation increases (Gehlbach et al., 2016; Lin-Siegler et al., 2016; Pintrich, 2003; Schraw et al., 2001). To further substantiate the correlation between success and motivation, Siegle et al. (2017) stated that students feel more successful when they find value in the learning tasks and are thus more motivated to learn in school. Teachers who design academic tasks with success in mind will inherently motivate students.

Interest, another component of the MUSIC model, correlates directly with student motivation and aligns with current research (Bolkan et al., 2015; Groccia, 2018; Park et al.,

2016; Ruzek et al., 2016; Siegle et al., 2017). Jones and Skaggs (2016) discussed two different types of interest levels: individual interest and situational interest. Individual interest refers to students having an interest in specific domains such as math, science, or history, and situational interest implies a more immediate type of interest that is more spontaneous due to the activities that are occurring in the classroom (Ainley & Ainley, 2011; Jones & Skaggs, 2016; Schraw et al., 2001). When teachers develop lessons with interest in mind, students will pay attention, feel a sense of belonging in the school community, and be more motivated to learn (Finn, 1989; Jones & Skaggs, 2016; Petre, 2017).

The last component of the MUSIC conceptual framework, caring (Jones & Skaggs, 2016), correlates directly with affective engagement in school; when students feel that the school community cares about the students' success, motivation increases (Birch & Ladd, 1997; Finn, 1989; Groccia, 2018; Ruzek et al., 2016; Yang et al., 2018). Further research states that caring relationships can support learning. This finding corresponds to the research conducted by Skinner et al. (2016), which found that motivation contributes to students' socioemotional welfare; when students are motivated, they experience reduced stress. Coping skills are also linked the caring component of MUSIC and academic achievement.

To further illustrate the relationship between caring and coping, Skinner et al. (2016) discussed that when successful students are trying to cope with academic problems in school, they seek support from caring people within the school community. Furthermore, coping positively correlates with students' affective engagement and motivation in school. Consequently, feelings of relatedness, an aptitude for academic tasks, and self-sufficiency support students' success in school (Finn, 1989; Groccia, 2018; Skinner et al., 2016; Yang et al., 2018). The research conducted by Skinner et al. directly links motivation and coping, indicating

that motivation and coping are “complementary processes” (p. 2,113); high achieving students discover ways to cope in school, and as a result are more motivated to learn. When teachers motivate students in school and employ pedagogical practices that support a positive school climate, all learners have opportunities to succeed. The purpose of this research is to inform all stakeholders—principals and teachers alike—about best practices to engage all learners, with an emphasis on students living in poverty, to support optimum learning outcomes.

Technology and 21st Century Skills

This section discusses the relationship between students living in poverty and preparing them for living in the 21st century with the purpose of informing educational leaders about 21st century skills and the importance of technology integration in schools. In March 2013, the State Superintendent of Public Instruction stated that California had joined the Partnership for 21st Century Skills, “a network designed to teach every student real-world skills to meet the needs of a competitive global economy” (California Department of Education, 2013, p. 1).

[The] “Partnership for 21st Century Learning (P21) Framework for 21st Century Learning was created with input from educators, business leaders, and policymakers to define and illustrate the skills, knowledge, expertise, and support systems that students need to succeed in work, life, and citizenship. (Battelle for Kids, 2019, p. 1)

Furthermore, the framework addresses three components necessary for developing 21st-century skills: life and career skills, learning and innovation skills including critical thinking, communication, collaboration, and creating [the four Cs]), as well as information, media, and technology skills (Battelle for Kids, 2019). Support systems are incorporated into each of these components, including 21st century standards and assessment, curriculum and instruction,

professional development, and the learning environment (Battelle for Kids, 2019; Schrum & Levin, 2015).

Moreover, the P21 framework describes key subjects that align with 21st century themes, including English, reading, languages, the arts, math, economics, science, geography, government, history, and civics. Within each of these subjects, it is critical to promote a deep understanding of the academic content by incorporating global awareness, business literacy (including financial, economic, and entrepreneurial), civic literacy, environmental literacy, and health literacy (Battelle for Kids, 2019). Following is a discussion of the P21 framework and the interdisciplinary themes, the skills needed for living in the 21st century, and leaders' responsibility to promote technology education. Furthermore, it is necessary to discuss the role of technology for students living in poverty.

Interdisciplinary themes. In 2017, in partnership with the Office of Educational Technology, the United States Department of Education co-authored the National Education Technology Plan Update (NETP), which “describes specific actions the United States should take to ensure learners of all ages have opportunities for personal growth and prosperity and remain competitive in a global economy” (U.S. Department of Education & Office of Educational Technology, 2017, p. 8). The interdisciplinary themes in the P21 framework support learners being competitive in a global economy and include the following:

- Global awareness addresses all learners working collaboratively with other individuals from diverse backgrounds, including different languages and cultures.
- Varying types of business literacy suggest that learners understand how to make economic decisions, recognize the relationship between the economy and society, and have the ability to use entrepreneurial skills to be more productive.

- Civic literacy considers that all learners know how to stay informed and comprehend the governmental process at the local, state, national, and global levels. It also considers the ability to understand the implications of making civic decisions at the local and global level.
- Environmental literacy encompasses the importance of understanding the conditions that affect the environment such as climate, food, and ecosystems. Environmental literacy also addresses the ability to investigate solutions to environmental challenges at the local and global level.
- Health literacy includes the understanding of health information, including physical health, mental health, and making health-related decisions (Battelle for Kids, 2019).

Skills needed for living in the 21st century. In addition to the interdisciplinary themes discussed in the P21 framework, it is necessary to consider the skills that are needed to help all learners be competitive in a global economy. It is essential to help learners learn how to solve problems in technology environments, develop critical thinking skills, cultivate the ability to work collaboratively, and incorporate multimedia communication, while simultaneously including authentic engagement to support the interdisciplinary themes is essential (Dietrich & Balli, 2014; Tarbutton, 2018; U.S. Department of Education & Office of Educational Technology, 2017; U.S. Department of Education, Institute of Education Sciences, & National Center for Education Statistics, 2018; Warschauer & Matuchniak, 2010). The P21 framework addresses three specific areas that support the ability of all learners to navigate 21st century skills effectively (Battelle for Kids, 2019).

Life and career skills emphasize that individuals need to navigate the complexities of working and living in a competitive technological environment effectively (Battelle for Kids,

2019; Cevik & Senturk, 2019; Tarbuton, 2018). The first life and career skill includes the ability to be flexible and adaptable. Developing the ability to accept job responsibilities in varied contexts and work in an environment with ambiguity is fundamental for working in the 21st century (Battelle for Kids, 2019; Nehring, Charner-Laird, & Szczesiul, 2019). Flexibility is also essential to consider, and the ability to receive feedback and negotiate diverse beliefs is particularly useful in a globally competitive culture (Battelle for Kids, 2019, Schrum & Levin, 2015; U.S. Department of Education & Office of Education Technology, 2017). Similarly, when individuals have the ability to take initiative and be self-directed, it highlights their time management skills and demonstrates their dynamic commitment to working at a professional level (U.S. Department of Education et al., 2018; U.S. Department of Education & Office of Educational Technology, 2017). Another life and career skill establishes the relevance of interacting effectively with diverse teams (Tarbuton, 2018). Professionalism and open-mindedness are essential when working in the 21st century (Battelle for Kids, 2019). The last life and career skill discussed in the P21 framework is productivity and accountability. To navigate effectively in the 21st century, individuals need to set goals and plan effectively to achieve those goals (U.S. Department of Education & Office of Education Technology, 2017).

Learning and innovation skills are also essential for 21st century learning (Rahman, 2019; Schrum & Levin, 2015; U.S. Department of Education & Office of Education Technology, 2017). The four areas in this category are creativity and innovation, critical thinking and problem solving, communication, and collaboration (Battelle for Kid, 2019; Rahman, 2019; Tarbuton, 2018; U.S. Department of Education & Office of Education Technology, 2017). Battelle for Kids (2019) further described these four characteristics as the ability to utilize idea-creation techniques, synthesize and interpret information to solve problems, articulate ideas with others

effectively, and have the ability to collaborate with others, more specifically, to collaborate with individuals from diverse groups. Schrum and Levin (2015) emphasized the significance of learning and innovation skills in the 21st century, stating that “the ability to access, evaluate, synthesize, and communicate large amounts of rapidly changing information is required to solve problems and create new knowledge in a global society” (p. 17).

Information literacy, media literacy, and technology skills represent the last component of the P21 framework (Battelle for Kids, 2019). According to Battelle for Kids (2019),

People in the 21st century live in a technology and media-driven environment, marked by various characteristics, including 1) access to an abundance of information, 2) rapid changes in technology tools, and 3) the ability to collaborate and make individual contributions on an unprecedented scale. Effective citizens and workers of the 21st century must be able to exhibit a range of functional and critical thinking skills related to information, media, and technology. (p. 5)

Having the ability to use and evaluate information effectively; understand the legal issues that encompass the access and use of digital information; and utilize information, communication, and technology (ICT) are paramount for navigating in the 21st century (Battelle for Kids, 2019; Rahman, 2019; Schrum & Levin, 2015).

Responsibility of leaders to promote technology education. The National Education Technology Plan (NETP) Update (U.S. Department of Education & Office of Education Technology, 2017) discussed the importance of leaders’ ability to create a culture that embraces innovative strategies to transform technology education. Furthermore, strong leadership is required to establish a shared vision “for how technology best can meet the needs of all learners and to develop a plan that translates the vision into action” (p. 5). Additional research further

emphasized the importance of leadership encouraging technology usage and supporting teachers to integrate technology in classrooms (Alliance for Excellent Education, 2012; Battelle for Kids, 2019; Robin, 2008).

The NETP described four characteristics of effective leadership that support technology education, transforming teaching, and the education process (U.S. Department of Education & Office of Educational Technology, 2017):

- Collaborative leadership means that leaders develop a shared vision and secure the necessary resources to support technology initiatives. When communicating with stakeholders, collaborative leaders utilize technology, emphasizing learning facilitated by technology.
- Personalized student learning considers that technology provides a pathway for students to learn through an active and collaborative learning process, with specific attention to “digital literacy and citizenship, and attend to general skills and dispositions, such as reflection, critical thinking, persistence, and perseverance” (p. 44). Effective leaders secure resources and support for teachers and encourage multidisciplinary projects, integrating technology, collaboration, and connection to other students worldwide.
- Robust infrastructure is imperative in order to utilize technology in schools. Leaders need to ensure that there is connectivity, the necessary devices, and maintain the infrastructure with up-to-date software and apps.
- Personalized professional learning is necessary for successful technology implementation. Professional development needs to be relevant, and leaders need to establish clear outcomes that support student learning. Effective leaders provide

technological tools for professional development, ensure that teachers have time to collaborate, and promote opportunities for professional learning.

Competent leaders are instrumental in promoting technology education, and it is imperative for teachers to provide opportunities to improve academic achievement by utilizing technology (Sauers & McLeod, 2017). To this end, Harris, Mishra, and Koehler (2009) discussed the intersection of technology, pedagogy, and content knowledge (TPACK) as “a form of professional knowledge that technologically and pedagogically adept, curriculum-oriented teachers use when they teach” (p. 401). Teachers need to become adept at differentiating content based on student need and have an understanding of how technology can support challenging concepts. At the same time, teachers need to have the technological expertise along with the knowledge of how to implement the technologies effectively. In order for teachers to effectively utilize technology to teach the academic content, they must have a supportive and qualified leader who provides professional development that aligns with the interacting components of TPACK (Harris et al., 2009). The TPACK framework provides a comprehensive understanding of theory, pedagogy, methodology, and practice to support teaching students “to learn in contexts that honor the rich connections between technology, the subject matter (content), and the means of teaching it (the pedagogy)” (Mishra & Koehler, 2006, p. 1047). Leaders at the school and district levels need to have an understanding of research-based practices and how to implement them effectively in order to promote positive learning outcomes for all students (U.S. Department of Education & Office of Educational Technology, 2017).

Technology and students living in poverty. Research indicates that students living in poverty do not have the same access to technology as students living in higher socioeconomic status households.

The U.S. Census Bureau uses a set of money income thresholds that vary by family size and composition. A family, along with each individual in it, is considered poor if the family's total income is less than that family's threshold. (U.S. Department of Education et al., 2018, p. xxi)

In 2010, due to government funding (specifically the federal e-Rate program), all high-poverty schools had access to Internet-connected computers, and with Title I funding, they were able to purchase computers (Warschauer & Matuchniak, 2010). However, there is a direct correlation between living in poverty and home Internet access; specifically, children between the ages of 5 and 17 who live below the poverty threshold have less access to home internet than students not living in poverty (U.S. Department of Education et al., 2018). "The digital divide refers to the gap between those who have access to technology and those who do not" (Huffman, 2018, p. 239). It is vital that all students have an understanding of how to utilize technology in schools and at home (Huffman, 2018; Sheninger, 2019; U.S. Department of Education & Office of Educational Technology, 2017; Warschauer, Knobel, & Stone, 2004; Warschauer & Matuchniak, 2010).

To further explain the digital divide, it is necessary to consider digital inclusion. Research indicates that having technology is not sufficient in itself; updated software, equal access to ICT, maintained equipment, and trained personnel are needed to close the digital divide (Huffman, 2018; Sargent & Ahmed, 2017; Schrum & Levin, 2015). Furthermore, Sargent and Ahmed (2017) stated that:

being digitally excluded could potentially impact an individual's health and well-being, and their ability to learn and to enhance wealth, strengthen job skills, get employment,

benefit from quality education, obtain critical information, socially connect, and take advantage of opportunities for civic and social engagement. (p. 64)

Students living in high-poverty neighborhoods lack access to technology at home, and at school, teachers have difficulty utilizing technology effectively due to the challenges of teaching students in poverty, including students with limited computer experience and more at-risk students (U.S. Department of Education et al., 2018; Warschauer & Matuchniak, 2010). To conclude, “appropriate technology can be hugely helpful in providing students with tools to become productive learners and assist in creating a learning environment that permits active engagement in content that would not otherwise be readily available” (Wade, Rasmussen, & Fox-Turnbull, 2013, p. 164), especially for students in poverty. Students living in the 21st century need access to technology and teachers who know how to use technology effectively. The scope of this research is significant for principals, teachers, students, and ultimately, society; as a result, this study will build capacity for educators to utilize technology, potentially influencing student outcomes.

Students in Poverty

The statistics surrounding poverty and education confirm the importance of exemplary teachers and professional development in supporting high-quality education. In 2016, there were 14,047,290 children living in poverty (Koball & Jiang, 2018). To further illustrate the statistics surrounding students in poverty, “Twenty-two percent of children who have lived in poverty do not graduate from high school, compared to six percent of those who have never been poor” (Hernandez, 2011, p. 3). Moreover, in 2010, 83% percent of children living in poverty were not proficient in reading (Hernandez, 2011).

Furthermore, students living in poverty have language deficits, underdeveloped social skills, emotional issues, and additional stressors and health concerns; as a result, many such students fall behind in school (Hernandez, 2011; Hirn et al., 2018; National Education Association [NEA], 2016). Hernandez (2011) identified that students living in poverty typically attend lower-performing schools and do not develop proficient academic skills, further accounting for their increased high school dropout rate. Additional characteristics confirm the challenges educators have when teaching students in poverty. Attendance is an issue for students living in poverty due to poor health and family crises; moreover, students in poverty live in more dangerous housing environments that include unsafe drinking water and air pollution (Chang & Romero, 2008; Hernandez, 2011; NEA, 2016). Furthermore, families in poverty lack “adequate housing, food, clothing and books, and often do not have access to high-quality childcare” (Hernandez, 2011, p. 7). To complicate these challenges further, it is estimated that 50-80% percent of students in poverty have experienced trauma, which affects the developing brain, causing cognitive delays, difficulty concentrating, and memory problems (Futures without Violence, 2015). Students living in poverty have many challenges, including health challenges, emotional challenges, and academic challenges (Hirn et al., 2018).

Poverty and academic implications. School leaders across the United States continue to struggle to address the barriers that prevent academic success for students in poverty (Kearney, Herrington, & Aguilar, 2012). Reeves (2000) named the concept of 90/90/90 schools, describing schools in which 90% of the students are classified as being in poverty, 90% of the students are non-White, and 90% of the students are achieving at a minimum of 90% on standardized assessments. Furthermore, Reeves described common characteristics of 90/90/90 schools, establishing the success of the 90/90/90 model. The schools “focus on academic achievement”

(p. 188) by using school accountability indicators to measure improvement. Another characteristic illustrates the importance of utilizing curriculum to improve students' reading, math, and writing skills. To further explain the success of the 90/90/90 schools, teachers frequently administer and analyze assessments to inform instruction, giving students multiple opportunities to achieve academic success. These schools also attribute their success to emphasizing writing as a tool for assessment; teachers can obtain further diagnostic information when students "demonstrate their thinking process" (p. 190). Lastly, 90/90/90 schools employ a peer-review type model to score students' assessments, utilizing protocols and ensuring reliable evaluation of student work.

Additionally, Kearney et al. (2012) identified three specific qualities necessary for 90/90/90 schools to achieve success: "support structures, relationships, and consistency" (p. 341). The first element, support structures, includes how the leadership team hires staff, the delivery of effective professional development, the importance of providing input to the school community, and lastly, the importance of highly effective leadership by the school principal (Kearney et al., 2012). The next element to ensure success at 90/90/90 schools is relationships. Success is achieved by having positive, trusting relationships among all stakeholders in the school community, including the administration team, the families that attend the school, the faculty, and the community, further confirming research findings of Benekos (2016), Devine et al. (2013), Gentry et al. (2011), and Kearney et al. (2012). The last element of consistency addresses how teachers implement curriculum programs and the pedagogical practices they employ. Teachers work in grade-level teams, providing opportunities to plan instruction for each grade level, confirming the importance of consistency in instructional practice (Kearney et al., 2012). To conclude the discussion on the success of 90/90/90 schools, schools can achieve 90%

success when critical support structures are in place, when there are trusting relationships within the school community, and when there is school wide consistency in implementing curriculum.

Poverty and classroom implications. Jensen (2013b) has conducted extensive research surrounding poverty, confirming that teaching students in poverty can be challenging. Moreover, the research specifies seven key differences between students in poverty and middle-class students.

Health and nutrition. People in poverty exercise less and do not always receive proper medical care or have the necessary medications. Additionally, poor people are more prone to ear infections, have higher exposure to lead, and are more likely to develop asthma. Furthermore, students who live in poverty lack a healthy nutritional diet, adversely affecting their behavior, including lethargy or hyperactivity (Jensen, 2013b). Teachers can ensure that students get regular physical activity during the school day, improving students' overall physical health.

Vocabulary. Children who live in poverty attend schools with fewer supports for language development (Neuman, Kaefer, & Pinkham, 2018). Furthermore, research indicates that lower socioeconomic status (SES) preschoolers differ in verbal abilities from middle-class children, and the disparity begins in the first few years of life, increasing the risk of academic failure (Fernald, Marchman, & Weisleder, 2012; Jensen, 2013b; Walker, Greenwood, Hart, & Carta, 1994). Jensen (2013b) reported that by the age of 4, children in middle-class families have heard approximately 26 million words; in lower-income families, children by the age of 4 have heard approximately 13 million words. When teachers incorporate vocabulary-building activities daily, it can improve the learning outcomes for students in poverty.

Effort. Children from poverty appear more unmotivated and have lower self-esteem than middle-class students (Cuthrell, Stapleton, & Ledford, 2009; Jensen, 2013b). Additional

research emphasizes that poverty is not the primary factor related to students' motivation; the teacher and the school community correlate directly with students' effort and school behaviors (Finn & Rock, 1997; Irvin, Meece, Byun, Farmer, & Hutchins, 2011). When teachers connect learning to relevant experiences, have high expectations, and give positive daily feedback, students' effort in school improves (Jensen, 2013b).

Hope. Research confirms that children in poverty have a lack of hope or develop a sense of hopelessness in their ability to change their condition in life and future outcomes (Jensen, 2013b; Maholmes, 2014; Robb, Simon, & Wardle, 2009; Sheehan & Rall, 2011). Teachers' beliefs about hope can positively affect student learning and reinforcing students' choices can cultivate positive attitudes among students (Jensen, 2013b). Moreover, hope is considered "malleable and can be a spark for and pathway to change" (Lopez & Magyar-Moe, 2015, p. 484). Maholmes (2014) suggested that "hopefulness is thought to foster perseverance, persistence, and resilience in uncertainty" (p. 2). When students have hope, they are more likely to achieve success.

Cognition. Low SES is associated with diminished cognitive abilities and language development (Lipina, 2016; Neuman et al., 2018). Research also suggests that there is a significant relationship between different SES levels and cognition; parents with minimal education can affect their children's school achievement (Bradley & Corwyn, 2002). Jensen (2013b) further illustrated the cognitive challenges students from lower SES households face, stating that students with distractibility issues and a lack of self-monitoring strategies struggle more in school. Learning how to organize information and how to study benefits students who have limited cognitive capacity.

Relationships. Living in poverty can impede relationships, including parents' ability to respond appropriately to their children's emotional needs (McLeod & Shanahan, 1993). There is evidence to support the notion that children living in lower SES homes experience more chaos, which affects the developing brain. Additionally, children from lower SES homes receive more reprimands than positive comments. Moreover, stress about housing, food, and health care interferes with parenting skills (Jensen, 2013b). The analysis presented in Jensen's (2013b) *How Poverty Affects Classroom Engagement* emphasizes the importance of teachers developing positive relationships with students; teaching students how to learn, discussing students' families, and demonstrating desired behavior all improve the teacher-to-student relationship.

Distress. Students living in poverty experience more chronic stress more than middle-class students (Jensen, 2013b). Distress can affect the developing brain, success in school, and social relationships (Evans, Kim, Ting, Teshler, & Shannis, 2007), leading to disruptive classroom behaviors, including talking back and inappropriate language. Encouraging responsibility and teaching coping skills diminish students' distress, thereby creating a more engaging classroom atmosphere (Jensen, 2013b). There are many complex challenges related to teaching students in poor communities, and it is critical to encourage student engagement (Munns, Hatton, & Gilbert, 2013). Additionally, shifting from a deficit mindset to a growth mindset promotes a classroom environment where the focus is on learning (Munns et al., 2013), further emphasizing the importance of student engagement.

The Consequences of Disengagement

Student engagement is multifaceted, incorporating behavioral, emotional, and cognitive components (Appleton et al., 2008; Archambault, Vandenbossche-Makombo, & Fraser, 2017; Carter et al., 2012; Moreira et al., 2018; Skinner, Kindermann, & Furrer, 2009). Furthermore,

engagement addresses a student's involvement within the school community and considers effort, enthusiasm, focus, concentration, persistence, and purpose as characteristics for engaging on behavioral, emotional, and cognitive levels (Skinner, et al., 2008; Skinner & Pitzer, 2012). Further research has discussed the importance of students engaging from the onset of their school career, therefore influencing school perseverance and academic success (Archambault et al., 2017; Finn, 1989; Fitzpatrick & Pagani, 2013; Van Ryzin, 2011).

Additionally, it is important for students to be engaged with academics, including a willingness to participate and to be focused cognitively while learning academic content (Connell & Wellborn, 1991; Skinner, Kindermann, Connell, & Wellborn, 2009; Skinner et al., Furrer, 2009). Skinner and Pitzer (2012) discussed the implications of students engaging actively during academic tasks, identifying three critical purposes of this type of engagement: (a) when students participate in hands-on, heads-on activities, it will result in a deeper understanding of knowledge and skills; (b) student engagement positively influences students psychological and social experiences in school; and (c) engagement correlates directly with academic achievement, and at the same time builds resilience and coping mechanisms for students to manage the challenges and stressors of school.

Disengagement. Disengagement refers to the process of disassociating from school, detaching from school norms, and decreasing effort; it is consistent with feelings of passivity, dejection, boredom, and discouragement (Balfanz, Herzog, & Mac Iver, 2007; Skinner et al., 2009). Disengagement is also referred to as disaffection, burnout, or indifference, and considers additional factors such as academic outcomes, how students feel about school, and the positive or negative relationships they have with other students or teachers (Miceli & Castelfranchi, 2000; Salmela-Aro, Kiuru, Leskinen, & Nurmi, 2009; Skinner & Pitzer, 2012; Vallerand et al., 1993).

To further illustrate engagement and disaffection (disengagement), the research conducted by Skinner and Pitzer (2012) illustrates the conceptualization of engagement, including behavioral, emotional (affective), and cognitive dimensions of engagement and the characteristics that highlight engaging and disaffection characteristics (see Table 1). Skinner and Pitzer's research explained that behavioral engagement incorporates characteristics such as effort and perseverance when facing obstacles, emotional engagement encompasses enthusiasm and satisfaction, and cognitive engagement includes concentration and heads-on participation. Table 1 also acknowledges the opposite of engagement and addresses behaviors such as withdrawing from academic tasks, demonstrating apathy, and a lack of motivation in school. When educators understand the indicators of engagement and disaffection, they have the opportunity to increase student engagement, and as a result, students are more invested in their learning process (Archambault et al., 2017; Moreira et al., 2018; Skinner & Pitzer, 2012). Hence, disengagement has a negative impact on students' academic outcomes, thereby decreasing their likelihood of graduating from high school (Appleton et al., 2008; Balfanz & Byrnes, 2006; Balfanz et al., 2007; Christenson & Thurlow, 2004; Finn, 1989; Moreira et al., 2018).

There is significant concern surrounding the dropout rate in the United States; in 2017, 2.1 million students dropped out of high school (Christenson & Thurlow, 2004; National Center for Educational Statistics, Institute of Education Sciences, n.d.b). The cost to society is considerable; billions of dollars are spent on welfare and unemployment programs due to students dropping out of school (Aldridge, McChesney, & Afari, 2017; Christenson, Sinclair, Lehr, & Hurley, 2000). Indeed, as Jensen (2013a) noted, "the academic record of students who live in poverty is not good. In the United States, if you are poor, your odds of graduating are lower than are those of a middle-income student" (p. 1).

Table 1

Engagement and Disaffection

	Engagement	Disaffection
Behavior	Action initiation	Passivity, Procrastination
• Initiation	Effort, Exertion	Giving Up
• Ongoing participation	Working Hard	Restlessness
• Re-engagement	Attempts	Half-hearted
	Persistence	Unfocused, Inattentive
	Intensity	Distracted
	Focus, Attention	Mentally withdrawn
	Concentration	Burned out, Exhausted
	Absorption	Unprepared
	Involvement	Absent
Emotion	Enthusiasm	Boredom
• Initiation	Interest	Disinterest
• Ongoing participation	Enjoyment	Frustration/anger
• Re-engagement	Satisfaction	Sadness
	Pride	Worry/anxiety
	Vitality	Shame
	Zest	Self-blame
Cognitive Orientation	Purposeful	Aimless
• Initiation	Approach	Helpless
• Ongoing participation	Goal strivings	Resigned
• Re-engagement	Strategy search	Unwilling
	Willing participation	Opposition
	Preference for challenge	Avoidance
	Mastery	Apathy
	Follow-through, care	Hopeless
	Thoroughness	Pressured

Note. Adapted from “Developmental Dynamics of Student Engagement, Coping, and Everyday Resilience,” by E. Skinner & J. Pitzer, 2012, in S. L. Christenson, A. L. Reschly, & C. Wiley (Eds.), *Handbook of Research on Student Engagement* (p. 25). New York, NY: Springer Science & Business Media. Copyright 2012 by the authors. Adapted with permission.

The cost of disengagement is significant. Research indicates that student engagement is relevant for preventing school dropout; when students are engaged, they develop a sense of belonging to the school community and their motivation to learn increases (Appleton et al., 2008;

Christenson & Thurlow, 2004). It is also important to consider that the quality of students' academic engagement correlates directly with positive student outcomes (Aldridge et al., 2017; Appleton et al., 2008; Balfanz & Byrnes, 2006; Finn, 1989; Jensen, 2013a; Lovelace, Reschly, & Appleton, 2017; Moreira et al., 2018). The purpose of this study was to inform educational leaders and classroom teachers about the benefits of professional development for learning and to understand the pedagogical practices to improve student engagement and academic achievement for all learners (Hoang, Holopainen, & Siekkinen, 2018), ensuring all students have an opportunity to be successful, productive participants in society.

Chapter Summary

In summary, students who live in poverty need to be engaged in school in order to have positive educational outcomes. Professional development can provide educators with effective teaching strategies, including cooperative learning, project-based learning, and varying techniques to motivate students in school. Furthermore, it is essential to prepare all students to live in the 21st century and help them develop skills to be competitive in a global society. It is also important to consider that student engagement is multifaceted, and incorporating behavioral engagement, emotional engagement, and cognitive engagement strategies improves educational outcomes (Appleton et al., 2009; Archambault, Vandenbossche-Makombo, & Fraser, 2017; Carter et al., 2012; Moreira et al., 2018; Skinner et al., 2009). When students are disengaged, the chances of dropping out of high school increase. Chapter 2 further illustrated a direct correlation between poverty and school; when educators understand the impact of poverty on learning, the likelihood of academic success improves.

Chapter 3: Research Design and Methodology

This qualitative research study was grounded in the complex relationship between students living in poverty and student engagement. According to Creswell (2018), qualitative research is conducted to understand problems or issues by empowering people to share their stories and experiences. For this study, the primary purpose of interviewing teachers was to understand how teachers engage students who live in poverty. Furthermore, this study intended to examine the pedagogical practices that teachers employ in Title I schools to increase student engagement with the goal of increasing student achievement. Chapter 2 discussed in detail specific themes such as the importance of exemplary teachers, professional development to support and develop exemplary teachers, cooperative learning, PBL, motivation, and technology for 21st century skills, to establish a framework for educational leaders to promote and increase student engagement for students who need it the most.

This chapter discusses the research methodology that was applied to answer the research questions and outlines the research design, the phenomenological approach, and the rationale for choosing that approach. Furthermore, the chapter describes the method of sampling, the Institutional Review Board (IRB) process, and the consideration of using human subjects in the study. A discussion of the validity and reliability is presented, and the chapter concludes with a discussion of data analysis.

Restatement of Research Questions

This chapter describes the research methods that were applied to achieve the goal of this study, which was to answer the following four research questions:

1. What successful strategies are teachers using to support student engagement among low-income students?

2. What challenges do teachers encounter in increasing student engagement?
3. How do teachers measure success in developing student engagement strategies among low-income students?
4. What recommendations would teachers provide to incoming teachers to promote a high level of engagement among low-income students?

Nature of the Study

There are distinct characteristics of qualitative research. Creswell (2018) described eight specific characteristics that align with the purposes of this descriptive, phenomenological study.

1. The study was conducted in a natural setting. The researcher interviewed the participants at their school site, establishing face-to-face interactions that gathered information about the teachers' experiences with student engagement.
2. The researcher was the sole instrument in collecting data; the researcher conducted interviews using an interview guide that she designed. Additionally, the interview questions were open-ended, enabling the participants to share their experiences related to teaching students in poverty.
3. The researcher employed inductive and deductive logic. The inductive process included organizing the data into a comprehensive set of themes. Furthermore, the researcher applied deductive thinking or logic by ensuring that the themes aligned with the data.
4. Through the qualitative research process, the researcher focused on the participants' perspective, refraining from subscribing to preconceived perceptions based on her personal experience or exploration of the literature. The qualitative methodology incorporated multiple perspectives from each of the study's participants.

5. The research was conducted at the participants' school site, which enabled them to share the challenges and successes of engaging students in poverty in their work environment.
6. The goal of qualitative research is to learn about a specific issue from the participants' perspective. Through the process, the researcher should be prepared for unexpected circumstances and be willing to adapt and make modifications as needed.
7. The study was reflexive in nature; the researcher shared her background with the readers, providing an understanding of the purpose of this qualitative study.
8. The researcher gave a holistic account of the study and described the interactions between the participants and their perspectives in teaching students in poverty.

Furthermore, Creswell (2018) discussed essential features that support a worthwhile qualitative study: (a) the researcher “frames the study within the assumptions and characteristics of the qualitative approach to research” (p. 47); (b) the study is ethical; (c) the researcher must use a recognized approach to qualitative research, more specifically phenomenology; (d) the researcher focuses on a single topic and explores one concept; (e) the researcher engages in “rigorous data collection procedures” (p. 48); (f) the researcher provides a comprehensive explanation of the data collection, analysis, and reports, including triangulation of data; (g) the researcher uses multiple layers of abstraction to analyze the data and codes the data to present themes related to the study; (h) the researcher writes the study in clear language, engaging the reader, and accurately reporting the findings; and, lastly, (i) the researcher situates herself in the study, reflecting her personal experience with teaching students in poverty. The researcher strove to uphold all of these features and incorporate them into this study.

Strengths. As with all research, this study had both strengths and challenges. One of the strengths of qualitative research, specifically this phenomenological study, is that it produces descriptive data (Taylor, Bogdan, & DeVault, 2015). Furthermore, in a phenomenological study, it is incumbent upon the researcher to examine the participants' experiences in order to understand a specific phenomenon. Hence, the semi-structured interviews gave the researcher an opportunity to ask clarifying questions, collecting data that contributed to an overall understanding of the research questions.

Weaknesses. One of the challenges in qualitative research, or in a phenomenological study specifically, is that the researcher must understand the broad philosophical assumptions (Creswell, 2018). Another challenge that Creswell (2018) noted is the difficulties the researcher could have in bracketing personal experiences when interpreting the data. The researcher intended to analyze the data with integrity by organizing, coding, and transcribing the data to understand further the phenomenon being studied.

Assumptions. There are four philosophical assumptions in qualitative research. The first, the ontological assumption, discusses the nature of reality and the importance of understanding that "the reality is multiple as seen through many views" (Creswell, 2018, p. 20), and it is necessary for the researcher to report the different perspectives in the findings of the study. The ontological assumption aligns with symbolic interactionism and further explains the importance of understanding that different people have different points of view and experiences. The second philosophical assumption, the epistemological assumptions, refers to the subject matter being studied and how the researcher understands the content knowledge. Creswell (2018) emphasized the importance of the researcher getting as close to the participants as possible. Therefore, the researcher went to each of the participants' school sites, providing a context for a deeper

understanding of the message the participants conveyed during the interview process. The third assumption, the axiological assumption, is associated with the researcher positioning himself/herself and reporting his/her bias. In this study in particular, the researcher described her professional experience, ensuring that the stories voiced characterized an interpretation from both the perspective of the researcher and the participants (Denzin, 1989). The last philosophical assumption, methodology, specifies the research process, including the interview protocol, the interview questions, and the necessary follow-up or clarifying questions to enrich the detailed understanding of the topic being studied (Creswell, 2018).

Methodology

This study was phenomenological in nature. The semi-structured interview questions were predetermined with potential follow-up questions in mind to explore the experiences of teachers teaching in high poverty schools (Grossoehme, 2014). Furthermore, the questions were designed to “elicit stories” (Grossoehme, 2014, p. 110) from the participants in an “attempt to understand the world from the subjects’ point of view, to unfold the meaning of their experience, [and] to uncover their lived world” (Brinkmann & Kvale, 2015, p. 3).

To further understand the participants’ point of view, this study utilized the symbolic interactionist perspective, which places importance on the “social meanings people attach to the world around them” (Taylor, Bogdan, & DeVault, 2015, p. 22). Blumer (1969) identified three premises for the basis of symbolic interactionism. The first is that people’s actions are based on the meanings that they have for other people or varying experiences. In this study, it was the researcher’s intent to understand how the participants view student engagement and, more importantly, the significance or meaning of student engagement for students who live in poverty. The second premise of symbolic interactionism proposed by Blumer is that meaning is not

necessarily found in objects; instead, people understand how to view the world from other people. To understand the participants' perspective of engaging students in the classroom, the researcher asked the participants about professional development at their school site to gain an awareness of how teachers are learning information that ultimately benefits student outcomes. The last premise Blumer discussed is that people attach meaning to different situations through a process of interpretation. Moreover, people are continually interpreting and defining information as they receive it, and the people in organizations, such as a school site, see things in different ways. Therefore, the researcher encouraged each participant to share his/her perspective on student engagement and the strengths and challenges of engaging all learners in the classroom setting.

Structured process of phenomenology. According to Creswell (2018), a phenomenological study “describes the common meaning for several individuals of their lived experiences of a concept or phenomenon” (p. 75). More specifically, a phenomenological study focuses on the participants' similarities. The researcher collects the data from the participants and develops a description of what the participants experienced and how they experienced it. Moustakas (1994) delineated systematic steps that address data analysis procedures and guidelines for conducting phenomenological research:

1. Determine if phenomenological research is the best methodology to answer the research questions.
2. Identify a phenomenon that is worthy of studying.
3. Distinguish the philosophical assumptions and bracket out the researcher's own experiences, as much as possible.

4. Conduct multiple interviews from participants who have experienced the same phenomenon.
5. Generate themes by analyzing the data collected from the interviews.
6. Write a structured description of how the participants experienced the phenomenon.
7. Utilize a reporting structure, beginning with an introduction, providing a rationale for using phenomenology, explaining the philosophical assumptions, and including details about data collection and analysis, discussing how the phenomenon was experienced, and concluding with a description of the essence of the phenomenon.

Appropriateness of phenomenology methodology. The aim of this research was to describe the common experiences of seasoned classroom teachers in engaging students who live in poverty. Furthermore, conducting semi-structured interviews enabled the researcher to acquire the data and develop themes, establishing patterns and commonalities among the participants. More specifically, the most appropriate type of phenomenological approach utilized in this study was transcendental phenomenology. Moustakas (1994) described this type of research and explained that the focus is not on the researcher's interpretation of the data, but rather is more on the description of the participants' experiences. By employing the transcendental phenomenological approach, a phenomenon was identified, the researcher bracketed out her personal experiences, and the data were collected from the individual participants. Transcendental phenomenology was used to study 15 participants who teach in high-poverty schools and their experiences with student engagement.

Additionally, Creswell (2018) identified three specific challenges that are inherent in conducting phenomenological research. The first challenge is that researchers need to identify the philosophical assumptions inherent in their studies. The second challenge is ensuring that the

participants have the same experience with the phenomenon being studied. The last challenge is that the researcher must remain impartial and be able to “bracket personal experiences” (p. 81) from the research study. Although these are specific challenges in the phenomenological approach, in an attempt to circumvent these challenges, the researcher defined the population sample distinctly, ensured that her biases were clearly identified and stated, and outlined the impact of this study. Furthermore, this study sought to gain an understanding of teaching in Title I schools and can be used as a framework for educational leaders to implement best pedagogical practices for engaging students.

Research Design

Creswell (2018) described research design as the “process of research from conceptualizing a problem to writing research questions, data collection, analysis, interpretation, and report writing” (p. 5). More specifically, in order to access reliable data from the participants, a process was established, first stating the analysis unit, then the population, the sample size, and lastly the sampling technique. The researcher felt satisfied that the research design utilized in this study would be informative for educators and would yield invaluable information in relationship to the research questions.

Analysis unit. The purpose of this research study was to identify best pedagogical practices for engaging students living in poverty at behavioral, affective, and cognitive levels, in turn, promoting positive academic outcomes. The unit of analysis was one teacher in the Unified School District (USD, pseudonym).

Population. Kumar (2014) stated that “the accuracy of what you find out through your research endeavor, among other things, depends upon the way you select your sample, the people who are going to provide you with the information you need” (p. 250). Furthermore, Kumar

emphasized that a “small number of respondents, if selected correctly” (p. 250), can provide a sufficiently accurate assessment of what the researcher is trying to gain from the study population. For this reason, choosing experienced teachers not only in years of experience, but also in terms of teaching students in poverty, had the potential to yield significant contributions to educational leaders in supporting a high level of engagement with students, and therefore achieving positive school outcomes for students living in poverty. Therefore, the population is all the teachers in the USD.

The broadest population to which this study applies is that all teachers promote positive outcomes. The study has neither an inferential design, nor does it conduct significance in testing. As such, any generalization of the findings should be done with caution.

Sample size. In phenomenological research, a large sample size is not necessary, and in fact, a sample size of one can be sufficient. Moreover, the goal of phenomenological research is to discover participants’ structural experiences, and a more ideal sample pool should include a range of three to 10 subjects (Dukes, 1984). To further illustrate the importance of sample size, Sandelowski (1995) stated that for qualitative studies, the sample size needs to be large enough to provide an understanding of the phenomenon being studied, and small enough to obtain a deep analysis of the data. The intent of this qualitative study was to gain a deeper understanding of engaging students in school who live in poverty, and the sample size of 15 participants was deemed appropriate to “provide ample opportunity to identify themes” (Creswell, 2018, p. 160), affording the researcher an optimal chance of reaching saturation for data analysis.

Purposive sampling. Purposeful sampling is utilized in qualitative research to ensure that the researcher intentionally selects participants, informing a deeper understanding of the research questions and the phenomenon under investigation (Creswell, 2018). Kumar (2014)

further explained the considerations for purposive sampling, asserting that the goal of purposive sampling is to choose the participants who can “provide the best information to achieve the objectives of your study and are likely to have the required information and be willing to share it with the researcher” (p. 244). In this study, maximum variation sampling was employed, which consists of “determining in advance some criteria that differentiate the sites or participants” (Creswell, 2018, p. 159), increasing the likelihood that the data will reflect individual perspectives among the participants.

Participation selection. To identify a list of participants who met the qualifications for this study, the researcher developed a master list. The researcher then purposefully developed criteria for inclusion and exclusion, aiming to establish eligible participants for the study. If the master list was greater than 18-20 participants, the researcher utilized maximum variation strategies to limit the participant pool. The dissertation committee gave approval to the process for creating the final master list.

Sampling frame. A sampling frame, or the development of a master list, is required to study a subset of a population (Acharya, Prakash, Saxena, & Nigam, 2013). The Local District A Directory served as the main source for developing a sampling frame, providing the researcher with the names of the elementary schools in a specific region of LAUSD.

The directory lists 65 elementary schools, including the names of the principals at each school site and the profile for each school (Title I, Affiliated Charter, Dual Language, Magnet, or Pilot). The researcher narrowed the list of elementary schools to specifically target five elementary schools in the ABC Family of Schools. Then the researcher went to the websites of the five elementary schools to obtain access to the names of the teachers at each school site. Four of the five elementary schools posted their staff directory on the website, creating a master list of

128 teachers teaching at the elementary school level in Title I Schools in the ABC Family of Schools. The researcher emailed the individual teachers to request their participation in the study.

Criteria for inclusion. Criteria for inclusion. The criteria for inclusion in this research study were as follows:

1. An email address for the selected teacher was available.
2. The teacher had at least 10 years of experience.
3. The teacher worked in a Title I school in the ABC Family of Schools in Local District A.

Criteria for exclusion. To further exclude participants if necessary, the following criteria were used to exclude additional potential participants:

1. Participants who were not available to participate between January and April 2020.
2. Participants who declined to be recorded.
3. Participants who did not sign the informed consent.

Criteria for maximum variation. According to Patton (2015), applying purposive maximum variation for a small sample begins by “identifying diverse characteristics for constructing the sample” (p. 283). After applying criteria for inclusion and exclusion, to further identify a smaller sample, the researcher utilized criteria for maximum variation and ensured that:

1. The participants taught only at Title I schools.
2. The participants agreed to a face-to-face interview.
3. The participants’ gender, ethnicity, and years of experience were equally balanced among the participants.

By utilizing the purposive sampling method, the researcher was able to identify 15 participants for the study.

Protection of Human Subjects

After submitting the application for informed consent approval (Appendix A) the IRB at Pepperdine University approved the interview questions and the study at large, ensuring that human subjects' rights and safety were protected (Appendix B). Additionally, Creswell (2018) stated that after receiving approval from the IRB committee, it is crucial to ensure that (a) the participants know that they can withdraw from the study at any time; (b) the participants are aware of the purpose of the study; (c) the participants understand that their confidentiality is protected; (e) the participants are aware of the risks associated with participation in the study; (f) the participants are aware of any expected benefits by participating in the study; and (g) the participants and the researcher sign a consent stating that the study protects the welfare and dignity of human subjects. Furthermore, the researcher must act ethically to ensure that each participant's rights are protected.

Additionally, to ensure confidentiality, the participants were labeled with a number based on the order of the interview sequence: participant 1-participant 15. The researcher utilized pseudonyms for the participants' school location to further protect against the potential of a breach of confidentiality. Moreover, all data were stored in the researcher's garage in a fire-proof locked cabinet, and all data will be destroyed 3 years after the completion of the study. The researcher omitted all identifying participant information in the final research study and took all precautionary steps to maintain confidentiality as well as conduct an ethical study.

Data Collection

After receiving approval from the IRB committee and the list of 15 participants was finalized, data collection commenced. The first step involved emailing and or calling the participants utilizing a recruitment script (Appendix C). The purpose of the script was to establish continuity of communication between the researcher and the participants. If the participant met the inclusion criteria and agreed to participate, the interview questions and the informed consent form were emailed to the participant. After the researcher received the participant's signed consent form, the interview date was scheduled, and a confirmation email was sent to the participant to ensure he/she understood the time frame for the interview and the purpose of the study.

Additionally, the researcher brought a backup copy of the informed consent to the interview in the event that the form was not signed prior to the interview date. The recruitment process was repeated until the sample of 15 participants was achieved. If an experienced teacher declined to participate at any time during the study, the researcher utilized the master list of potential participants based on the inclusion, exclusion, and maximum variation procedures to include another participant. Furthermore, after each interview, the researcher stored the data in a fire-proof, locked cabinet in her garage to ensure confidentiality.

Interview Techniques

One-on-one interviews were utilized to obtain data in this qualitative study. According to Krueger (2015), "Stories provide insights that can't be found through quantitative data. A story helps us understand motivation, values, emotions, interests, and factors that influence behavior. Stories can give us clues about why an event might occur or how something happens" (p. 536). The goal of interviewing the participants was to gain invaluable insights and elicit responses that

would help determine the best practices for engaging students living in poverty. The researcher opened each interview with an icebreaker question to establish a comfortable setting for the participant. Moreover, “General interview skills include asking open-ended questions, listening carefully to ask follow-up questions, effective and sensitive probing, distinguishing different kinds of questions, and pacing the interview” (Patton, 2015, p. 493) to maximize the data collection. It was the researcher’s intent to listen with respect and refrain from interrupting the interview process unnecessarily.

To conduct an ethical interview, Patton (2015) asserted that: (a) the researcher must state the purpose of the interview; (b) the researcher must be transparent about the purpose of the study and be honest and clear with the participants, using language that is comprehensible; (c) the researcher must honor the participant’s time and not make any promises that cannot be kept; (d) the researcher must not cause any harm to the participant and ensure confidentiality; (e) the researcher understands the legal ramifications of confidentiality; (f) the researcher understands how to maintain the data in a safe and secure manner; (g) the researcher will have a confidant in the event of a difficult disclosure during the interview; (h) the researcher will know who to contact if ethical issues arise; and lastly, (i) the researcher will report any ethical challenges that were faced. It was important for the researcher to conduct ethical interviews; using Patton’s assertions about methodology ensured that the necessary steps were followed to address all components of an ethical interview.

Lastly, the researcher predetermined the location of each interview, conducting each interview in a natural setting, preferably at the participant’s work location. If that was not feasible, the interview was voice recorded via the Zoom Conferencing Tool. All notes and transcriptions of the interview were stored in a secure location.

Interview Protocol

According to Creswell (2018), “for a phenomenological study, the process of collecting information involves primarily in-depth interviews” (p. 161) with the goal of describing an understanding of a phenomenon among a small number of people who have similar experiences. Furthermore, an interview is designed to be a social in nature, based on conversations between the participants and the researcher (Rubin & Rubin, 2012; Warren & Karner, 2015). Therefore, it is essential to establish an interview protocol in order to gain a deeper understanding of the research questions and ensure that the interviewees understand the questions being asked of them (Creswell, 2018).

Additionally, Castillo-Montoya (2016) stated that “qualitative researchers can strengthen the reliability of their interview protocols by refining them through the interview protocol refinement (IPR) framework” (p. 811). To further explain the IPR framework, Castillo-Montoya confirmed that the framework is applicable in developing interview procedures, enabling the researcher to “elicit rich, focused, meaningful data that captures, to the extent possible, the experiences of the participants” (p. 812). The IPR consists of four phases:

1. Assure the research questions and the interview questions are in alignment,
2. Design an inquiry-based conversation,
3. Receive feedback on the interview questions to ensure reliability and trustworthiness as a tool to collect data,
4. Simulate or pilot the interview protocol to ensure that the questions work.

In an effort to employ a reliable interview protocol, the researcher followed the phases suggested by Castillo-Montoya’s (2016) research. In addition, the researcher sent the interview questions to each interviewee prior to the scheduled interview. A confirmation phone call was

made to each participant the day before the interview, not only to serve as a reminder, but also to answer any questions the interviewee might have had with regard to the interview. The researcher also asked open-ended questions, “promoting a conversation” (Castillo-Montoya, 2016, p. 813) that supported a comfortable environment for the participant and offering an opportunity for the participant to share his/her knowledge and experience related to engaging students in the classroom.

Relationship between research and interview questions. Following the interview protocol suggested by Castillo-Montoya (2016), the researcher developed 11 semi-structured interview questions that aligned with the research questions. For each of the four research questions (see Table 2), two to three interview questions were developed. According to Grosseohme (2014), phenomenological research “is all about the search for meaning” (p. 116). The interview questions were designed to provide an opportunity for the participants to share their experiences teaching students who live in poverty and to articulate best practices in engaging students. Furthermore, the intent of the interview questions was to help the researcher analyze the commonalities between veteran teachers and “gather descriptions of their lived experience” (Grosseohme, 2014, p. 114) to better understand the successes and challenges of teaching and engaging students in the classroom. Each interview question was designed to answer the research questions.

Table 2

Research Questions and Corresponding Interview Questions

Research Questions	Corresponding Interview Questions
RQ1: What successful strategies are teachers using to support student engagement among low-income students?	Icebreaker: How many years have you been teaching? And at this school? IQ 1: How many of your students are living in poverty? IQ 2: What strategies do you use to engage your students? IQ 3: Do you feel that the professional development at your school site helps you with student engagement strategies?
RQ 2: What challenges do teachers encounter in increasing student engagement?	IQ 4: What do you find to be your biggest challenge in engaging your students? IQ 5: Does the administration at your school site support you with your challenges?
RQ3: How do teachers measure success in developing student engagement strategies among low-income students?	IQ 6: How do you know that your students are engaged? IQ 7: How do you measure success? Test scores or do you use other measures? IQ 8: Have you received specific professional development on teaching students in poverty and the importance of student engagement for successful academic outcomes?
RQ4: What recommendations would teachers provide to incoming teachers to promote a high level of engagement among low-income students?	IQ 9: If a new teacher approached you and asked what is a successful strategy in engaging students, what would you say? IQ 10: What other advice would you give a novice teacher? IQ11: Is there anything else you would like to add?

Note. The table identifies four research questions and corresponding interview questions. Interview questions were then reviewed by a panel of two peer-reviewers and expert reviewers.

Validity of the study. When conducting a research study, it is crucial to ensure its validity. Smith (1991) described validity “as the degree to which the researcher has measured what he has set out to measure” (p. 106). Furthermore, Patton (2015) discussed the importance of the researcher administering the study in an “appropriate, standardized manner, according to prescribed procedures” (p. 22). In addition to the researcher preparing the participants prior to the interview by sharing the interview questions, the researcher also used a three-step process to ensure the validity of the study:

1. Prima-facie and content validity,
2. Peer-review validity, and
3. Expert review validity.

Prima-facie and content validity. The researcher began by developing the 11 interview questions that aligned with the research questions. More specifically, the researcher utilized the literature review presented in Chapter 2 to further understand the appropriate questions to ask, with the intent of answering the research questions. Prima-facie or “face validity judges whether a measure appears to be valid on the face of it” (Patten & Newhart, 2018, p. 126). The researcher ensured that prima-facie validity was established (see Table 3). Content validity is “an assessment of a measure based on the appropriateness of its contents” (p. 126). The purpose of establishing content validity is to ensure that the interview questions provide the researcher with responses that align with the research questions and answer the “construct in question” (p. 126).

Peer review validity. The next step the researcher utilized to ensure the study’s validity was to “seek an external check” (Creswell, 2018, p. 263) from outside experts. The purpose of the peer review is to confirm that the researcher is asking interview questions that align with the research questions. Two Pepperdine doctoral students peer reviewed the interview questions. For each question, they were asked to (a) keep the question as is, (b) delete the question, or (c) revise the question as suggested. Based on the recommendations by the peer reviewers, changes were made to the interview questions (see Appendix D).

Table 3

Research Questions and Corresponding Interview Questions (Revised)

Research Questions	Corresponding Interview Questions
RQ1: What successful strategies are teachers using to support student engagement among low-income students?	Icebreaker: How many years have you been teaching? And at this school? IQ 1: How would you define student engagement? IQ 2: What strategies do you use to engage students in the classroom? IQ 3: How does the professional development at your school site help you with student engagement strategies?
RQ 2: What challenges do teachers encounter in increasing student engagement?	IQ 4: What obstacles do you face in engaging your students? IQ 5: How does the administration at your school site support you with your obstacles? IQ 6: What additional resources would you need to feel better supported in increasing student engagement in your classroom?
RQ3: How do teachers measure success in developing student engagement strategies among low-income students?	IQ 7: How do you measure the level of student engagement in your classroom? IQ 8: How do you track or monitor engagement in your classroom?
RQ4: What recommendations would teachers provide to incoming teachers to promote a high level of engagement among low-income students?	IQ 9: If a new teacher approached you and asked what is a successful strategy in engaging students living in poverty, what would you say? IQ 10: What other advice would you give to a novice teacher at a Title I school with regard to student engagement? IQ 11: Is there anything else you would like to add?

Note. The table identifies four research questions and corresponding interview questions with revisions based on feedback from peer-reviewers and an expert reviewer. Subsequent changes were made to the order and phrasing of questions within the interview protocol.

Expert review validity. The last step in the validity process is the expert review.

According to Patton (2015), this process involves experts, increasing the credibility of the research. The dissertation committee provided an external audit for the interview questions.

Reliability of the study. It is necessary to ensure that the research is reliable. According to Patten and Newhart (2018), “A test is said to be reliable if it yields consistent results” (p. 136).

Richards and Morse (2013) confirmed Patten and Newhart’s research findings, stating that

“reliability requires that the same results would be obtained if the study were replicated” (p. 215). To support the instrument’s reliability, the researcher piloted the research questions with two experts who met the criteria for participation. By obtaining input from the pilot interviewees regarding the clarity and comprehensibility of each of the interview questions, the researcher ensured consistency and reliability of the data collection instrument.

Statement of Personal Bias

One of the goals of qualitative research is to minimize biases and present findings that represent the phenomenon being explored (Patten & Newhart, 2018). As such, it is essential that the researcher “report potential sources of bias and error” (Patton, 2015, p. 58) to validate the credibility of the research. Therefore, the following bullet points clearly identify the researcher’s personal bias:

- The researcher has been teaching in Title I schools for 36 years.
- The researcher has been teaching graduate school for 16 years.
- The researcher has an undergraduate degree in Child Development and a Master’s degree in Child and Adolescent Literacy, including a reading specialist credential.
- The researcher understands the complexities of teaching students who live in poverty and the importance of student engagement.

Bracketing and epoche. In phenomenological studies, the researcher needs to engage in bracketing or epoche by “hold[ing] the phenomenon up for serious inspection” (Patton, 2015, p. 575). Chan, Fung, and Chien (2013) confirmed that when the researcher brackets his/her own experiences, the researcher is therefore not influencing the participants’ perceptions of the phenomenon. According to Denzin (1989), this process involves the following steps:

1. The researcher located within the personal experiences of the participants key phrases that directly corresponded to the phenomenon in question.
2. The researcher interpreted the meanings of the key phrases.
3. When possible, the researcher asked the participants for clarification or their interpretation of the key phrases.
4. The researcher inspected the interpretations, looking for recurring characteristics of the phenomenon in question.
5. The researcher offered an explanation of the phenomenon.

Moreover, the researcher followed the recommendations established by Ahern (1999) and utilized a reflexive journal at the beginning of the research process, documenting any preconceptions related to student engagement and educating students who live in poverty. The researcher maintained the use of the reflexive journal throughout the research, describing the purpose of the research and assumptions regarding student engagement, further bracketing potential assumptions and areas of bias that might influence the research process and the data findings (Tufford & Newman, 2010).

Epoche is a Greek term that means refraining from judgment. In epoche, “Everyday understandings, judgments, and knowings are set aside, and the phenomena are revisited, visually, naively, in a wide-open sense, from the vantage point of a pure or transcendental ego” (Moustakas, 1994, p. 33). To explain further, the researcher strives to become aware of personal bias, makes an effort to minimize personal involvement in the study, and attempts to gain clarity about any misconceptions (Patton, 2015).

Data Analysis

After collecting data from the participants, the researcher transcribed the interviews. The researcher took notes while reading the transcriptions, then coded the notes, establishing themes based on the data to provide “standardization and rigor to the analytical process” (Patton, 2015, p. 110). In phenomenological research, according to Richards and Morse (2013), the researcher finds and explores themes to identify the meanings of the phenomenon. Creswell (2018) further described data analysis as an involved process that includes “organizing the data, conducting a preliminary read-through of the database, coding and organizing themes, representing the data, and forming an interpretation of them” (p. 181). The last step in data analysis is to report the findings. Reading, memoing, and coding were utilized in the data analysis.

Reading and memoing. Once the data were organized, the researcher read over the data, “writing notes or memos in the margins of field notes” (Creswell, 2018, p. 187), which provided an opportunity to understand the data in its entirety. Additional suggestions related to memoing include memoing at the onset of reading the data, creating a systematic organizational methodology for the memoing, using short phrases that capture the key ideas from the data, and including strategies that support easier retrieval of the memos (Creswell, 2018).

Coding. Coding is the next step after memoing; “forming codes or categories represents the heart of qualitative data analysis” (Creswell, 2018, p. 189). The intent of coding is to develop detailed descriptions, making sense of the information collected from the interviews (Creswell, 2018). Furthermore, Creswell (2018) described coding as the process of aggregating the data into smaller categories and then assigning a label to each specific code. This study utilized the following steps for data analysis, as recommended by Bazeley (2013):

1. Memoing was used to understand the thematic ideas.

2. Quotes were highlighted, informing the process of theme development.
3. The researcher made diagrams, utilizing visual representations to support the process of developing codes.
4. Summary statements were created to establish patterns.
5. The data were then interpreted after themes and codes were thoroughly developed.

Inter-rater reliability and validity. To ensure inter-rater reliability and validity, the researcher utilized the following steps suggested by Creswell (2018): (a) the researcher independently developed themes and categories with the first three interviews, (b) the researcher then identified two co-raters from Pepperdine University who had experience in qualitative research coding procedures. Each co-rater independently reviewed the transcripts and themes provided by the researcher. The findings were discussed, and consensus was reached for the themes. If consensus was not reached, the researcher sought the expertise of the dissertation committee, (c) the researcher proceeded with the analysis and coding for the remaining 12 interview transcripts to ensure consistency. Once the researcher completed all 15 interviews, she shared the results with the same two co-raters from Pepperdine University and discussed the coding to gain consensus. Then, (d) if consensus was not reached in establishing the themes for all the interview transcriptions, the researcher received expert advice from the dissertation committee, ensuring that 80% of codes were agreed upon, after which (e) the codes were finalized. In Chapter 4, the findings are reported.

Chapter 3 Summary

Chapter 3 detailed the research design and the phenomenological methodology that was utilized to investigate this study. The chapter began by restating the research questions and offering a discussion on the nature of this phenomenological study. The characteristics of

qualitative research were then discussed in the methodology section, including the elements of a worthwhile qualitative study. The chapter further identified the structured process of phenomenology and explained the reasoning for using this type of qualitative research for this study. The research design section included the unit of analysis, the population, the sample size, purposive sampling, participation selection, the sampling frame, and the criteria for inclusion and exclusion. Moreover, a discussion on the protection of human subjects was included and described in detail the IRB process. The next section discussed the data collection procedures, followed by the interview techniques and protocol employed to ensure a reliable interview. The following section included the reliability and validity of the study, including prima-facie validity, peer review validity, and expert review validity, establishing interview questions that were aligned with the research questions. The researcher also stated her personal bias and concluded with the data analysis procedures, including the memoing and coding steps that were utilized to ensure inter-rater reliability.

Chapter 4: Findings

Engaging students in the classroom is a defining characteristic of quality teaching (Ashwin & McVitty, 2015), and this study sought to understand the engagement of students who live in poverty. Research confirms that student engagement will promote positive school outcomes (Klem & Connell, 2004), and schools can influence student engagement, thereby preventing social and behavior issues (Appleton, Christensen, & Furlong, 2008). Furthermore, students who live in poverty are more likely to attend low-performing schools and have poorly qualified teachers (Clotfelter, Ladd, Vigdor, & Wheeler, 2007; Murnane, 2007; Valencia, 2015). Therefore, to better understand the challenges in teaching and engaging students who live in poverty, this study sought the expertise of experienced teachers teaching in high-poverty schools to highlight the best practices teachers employ to engage students. Specifically, this study sought to answer the following four research questions:

- RQ1: What successful strategies are teachers using to support student engagement among low-income students?
- RQ2: What challenges do teachers encounter in increasing student engagement?
- RQ3: How do teachers measure success in developing student engagement strategies among low-income students?
- RQ4: What recommendations would teachers provide to incoming teachers to promote a high level of engagement among low-income students?

To answer the research questions, an interview protocol composed of 11 open-ended questions was developed utilizing inter-reliability and validity procedures. The following questions were asked:

1. How would you define student engagement?

2. What strategies do you use to engage students in the classroom?
3. How does the professional development at your school site help you with student engagement strategies?
4. What obstacles do you face in engaging your students?
5. How does the administration at your school site support you with your obstacles?
6. What additional resources would you need to feel better supported in increasing student engagement in your classroom?
7. How do you measure the level of student engagement in your classroom?
8. How do you track or monitor engagement in your classroom?
9. If a new teacher approached you and asked what is a successful strategy in engaging students living in poverty, what would you say?
10. What other advice would you give to a novice teacher at a Title I school with regard to student engagement?
11. Is there anything else you would like to add?

Participants in this study were asked to provide responses to these 11 open-ended questions and to share their experiences and understanding of engaging and teaching of students who live in poverty. During the interview process, the researcher attempted to maintain a comfortable experience for the participants, ensuring an opportunity for them to answer the questions honestly and reflectively. The information collected from the responses to these 11 questions contributed to an in-depth understanding of best practices of engaging students by experienced teachers in high-poverty schools. This chapter provides information about the participants, as well as insight regarding the data collection process. Furthermore, this chapter explains the inter-

rater review process utilized to validate and analyze the data and includes the findings from the analysis of the data collected from the 11 interview questions.

Participants

Thirty-one potential participants were recruited to participate in this study with the intent to interview 15 participants. In terms of level of experience, participants had taught between 6-31 years. Although the maximum variation for inclusion was 10 years of experience or more, one participant who had 6 years of experience was included due to her level of expertise in teaching and engaging of students who live in poverty. After interviewing three participants, the collected data were coded. After coding 13 interviews, the results indicated that data saturation based on the increased number of common themes agreed upon by the participants. As a result of this data saturation was reached, the committee agreed that 13 participants provided sufficient evidence of saturation, leading the interview process to be concluded after participant 13.

Data Collection

Data collection for this study began by utilizing the Local District A Directory, which provided the researcher with the names of the elementary schools in a specific region of USD. A master list was created and sorted utilizing the criteria for inclusion, ensuring that the teachers were from Title I schools. After sorting through the master list, a total of 31 potential participants remained, ensuring maximum variation. After the researcher obtained IRB approval (Appendix B), participants were emailed utilizing a recruitment script (Appendix C). Data collection began in January 2020, and the first round of recruitment emails yielded 10 potential participants who were willing to be interviewed. Nine did not respond, and two potential participants declined. Of the 10 who were willing to be interviewed, seven potential participants were confirmed with an interview date. During the last week in January, the second round of recruitment emails was sent

to potential participants, yielding two more participants. To recruit further, a third set of emails was sent, confirming four more interviews. In one month, 31 emails were sent to potential participants, yielding 13 completed interviews.

Furthermore, participants who agreed to be interviewed were emailed the consent form and the interview questions prior to the scheduled interview. The researcher maintained the participants' confidentiality, ensuring that all participants were referred to using a participant number, and the school location was not disclosed. The researcher asked for an hour of each participant's time; however, the average interview time was 20 minutes, with the longest interview lasting 33 minutes, and the shortest interview lasting 15 minutes (see Table 4).

Table 4

Dates of the Participant Interviews

Participant	Date of Interview
Participant 1	January 21, 2020
Participant 2	January 23, 2020
Participant 3	January 26, 2020
Participant 4	January 26, 2020
Participant 5	January 27, 2020
Participant 6	January 27, 2020
Participant 7	January 28, 2020
Participant 8	January 30, 2020
Participant 9	January 30, 2020
Participant 10	February 4, 2020
Participant 11	February 4, 2020
Participant 12	February 10, 2020
Participant 13	February 13, 2020

Data Analysis

In qualitative research, forming codes or themes offers the researcher an opportunity to interpret and make sense of the data collected from the interviews (Creswell, 2018). Creswell (2018) described coding as the process by which researchers build descriptions, then apply codes, and lastly develop themes, providing a deeper understanding of the data. The process

began by audio recording the interviews and taking notes during the interview process. The researcher also followed the recommendations established by Ahern (1999) and maintained a reflexive journal before and throughout the data collection process, bracketing inherent assumptions and personal bias that could influence the data results (Tufford & Newman, 2010).

The next step in the data analysis process was to transcribe the interviews. The interviews were saved on a USB drive, and an outside agency transcribed the interviews using a 256-bit encrypted hard drive, wiping the files with extra washings, ensuring that the transcriptions could not be retrieved. The researcher then created a Google Sheet to “[aggregate] the text into small categories of information, seeking evidence for the code” (Creswell, 2018, p. 190). Each interview question had a separate sheet, enabling the researcher to develop significant interpretations of the data. The researcher analyzed and coded the interviewees’ responses, identifying common terms and phrases between participants. After coding the first three interviews, the researcher clustered the codes into meaningful themes based on the interpretation of the data, locating patterns that highlighted the stories that the participants conveyed during the interview process (Creswell, 2018). The last step in the data analysis was to validate the data employing the inter-rater reliability process.

Inter-Rater Review Process

After coding the first three interviews, the researcher validated the data utilizing the inter-rater review process. The peer reviewers were two doctoral students enrolled in Pepperdine University’s Doctor of Education in Organizational Leadership program. First, the reviewers looked at the first three transcripts, which were uploaded into a Google Drive folder. After reviewing the transcripts, the peer reviewers looked at the researcher’s codes, providing comments and specific recommendations regarding the themes. This feedback included changing

theme names, combining themes, and categorizing the codes using more appropriate key words. After the 13 interviews were transcribed and coded, the peer reviewers provided their final analysis of the data, ensuring that the codes and themes portrayed the collected data accurately. Once consensus was reached, the researcher coded the rest of the transcribed interviews.

Data Display

The data in this study were organized and presented corresponding to each research question and subsequent interview questions. Each interview question produced key words, phrases, and viewpoints, which were then categorized using codes and similar themes. A detailed description of each theme is included along with a participant quote to illustrate the transcribed data. To ensure integrity of the data, the participant quotes are offered verbatim and incomplete sentences may be included. The researcher made a diligent effort to ensure an accurate description of the participants' intent as well as maintain confidentiality. Each participant is referred to using a participant number and quoted as Participant 1 (P1), Participant 2 (P2), and so forth.

Research Question 1

The first research question asked, What successful strategies are teachers using to support student engagement among low-income students? Three interview questions corresponded to research question 1.

1. How would you define student engagement?
2. What strategies do you use to engage students in the classroom?
3. How does the professional development at your school site help you with student engagement strategies?

Interview question 1. Interview question 1 asked, How would you define student engagement? A thorough analysis of the responses to interview question 1 yielded 16 different responses, which were then grouped into four corresponding themes. The themes that emerged were: (a) attentive, (b) dedicated, (c) actively engaged, and (d), connection to learning (see Figure 1).

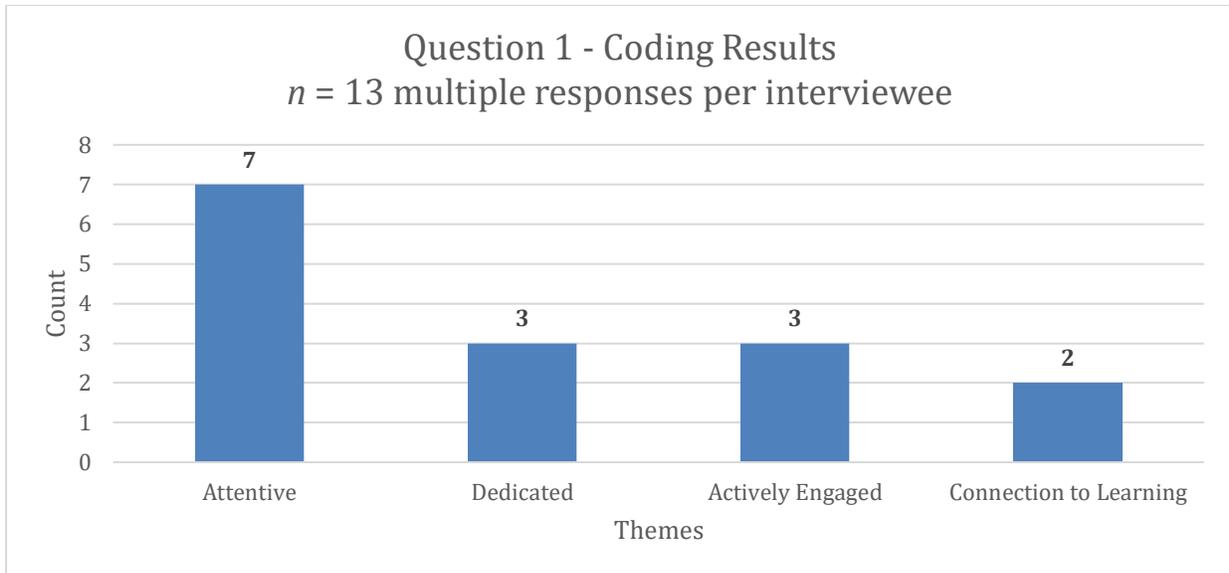


Figure 1. The notable terms defining student engagement. The figure illustrates four themes that emerged from responses to interview question 1. The data is presented in order of frequency in descending order. The numbers for each theme align with the number of responses in which a participant made a direct or indirect statement.

Attentive. Interview question 1 yielded *attentive* as the most significant theme for defining student engagement. Of the 15 key phrases, viewpoints, or responses, seven (47%) of the responses collected related directly or indirectly to defining student engagement. The key words, phrases, or viewpoints included: interested, bright-eyed, participating, answering questions, focused, listening, and paying attention. For example, P5 stated, “Student engagement. Well, it’s how they participate, how they listen, how well they’re paying attention.” P10 illustrated the importance of students being interested and attentive in learning, stating,

Student engagement is when you can get your students to not only be a part of you and understand you, but also in what they're learning no matter what they are learning, just to grab hold of their interest and to have them buy-in in what you're teaching.

Dedicated. The second most significant theme, *dedicated*, also defined student engagement for the participants. Of the 15 key phrases, viewpoints, or responses, three (20%) of the responses to interview question 1 related directly or indirectly to students' dedication to school and included key words such as: invested, caring, taking ownership, and love learning. P12 exemplified this theme, stating, "I guess it would be the attempt to get kids involved with the learning process and just learning for the sake of learning because you want them to love learning." Furthermore, P3 stated, "When they take ownership of their learning, their education, not only theirs, but their classmates, their school as a whole, I guess, is when they become engaged, truly."

Actively engaged. The third theme, *actively engaged*, yielded a frequency of three (20%), with code words including: active, interacting, and discussions. P6 stated, "I would say that [student engagement] it's something where you find your students actively participating with maximum participation whether it'd be independent or collaboratively." P2 further defined student engagement by sharing that, "For me, it's basically the difference between being active and being passive, being an active participant in their education. They're not just sitting back. They participate in discussions. They have to do things."

Connection to learning. The last notable theme for defining student engagement was *connection to learning*. Of the 15 key words and phrases for interview question 1, two of the responses (13%) directly or indirectly correlated with a connection to learning. The key words and phrases for this theme were: ability to connect and students feeling comfortable in the

classroom. P7 clearly stated, “I would define student engagement as the ability to connect with students on both a learning level as well as a social-emotional level,” and further defined student engagement as follows; “There’s a connection emotionally with the teacher, that I’m making a connection on a level that they understand.” Moreover, P8 shared, “It’s [student engagement] basically knowing that everyone in the class is with an open mind and able to be creative in a comfortable environment, and able to basically give 100% of their attention to whatever we are doing.”

Interview question 2. Interview question 2 asked, What strategies do you use to engage students in the classroom? A comprehensive analysis of interview question 2 yielded a total of 33 key words and phrases that were categorized into four different themes. The emerging themes were: (a) culturally responsive, (b) application, (c) discourse, and (d) technology (see Figure 2).

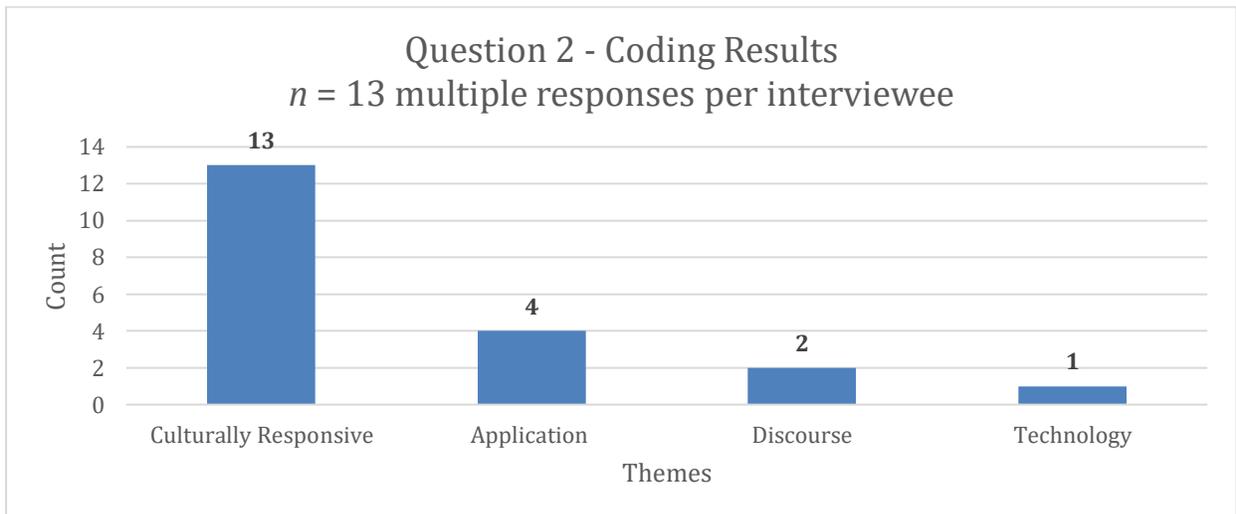


Figure 2. The notable terms referring to student engagement strategies. The figure illustrates four themes that emerged from responses to interview question 2. The data is presented in order of frequency in descending order. The numbers for each theme align with the number of responses in which a participant made a direct or indirect statement.

Culturally responsive. Interview question 2 yielded *culturally responsive* as the most significant theme for strategies teachers use to engage students. Of the 20 key phrases, viewpoints, or responses, all of the participants mentioned key words, phrases, and viewpoints

related to culturally responsive and 13 (65%) of the responses collected related directly or indirectly to student engagement strategies. Those responses included: giving choices, working in groups, conversations, call outs, hands on, think-pair-share, Kagan Strategies, Kahoot, music, nonverbal signals, varied seating, and differentiation. There were many keywords and phrases for culturally responsive, which Hammond (2014) defined as “The process of using familiar cultural information and processes to scaffold learning. Emphasizes communal orientation. Focused relationships, cognitive scaffolding, and critical social awareness” (p. 156). P13 highlighted the application of culturally responsive teaching by stating, “I use quite a few [engagement strategies]—big in my class is choice. I have flexible seating, so they get to not only choose where they sit, we have a lot of flexible groupings.” P11 further stated, “We do Kagan Strategies. It’s a lot of think-pair-share, but there are different ways of doing it. For example, one way is hand up, pair up.” P1 emphasized the importance of “letting them have a choice in some of the things they do in the classroom, like the projects that they do. Letting them work with each other.”

Application. The second theme for interview question 2, *application*, also addressed the application strategies that teachers employ to engage students. Four (20%) of the 20 key words and phrases related directly or indirectly to engagement strategies included code words such as: modeling, using realia, chunking instruction, and connecting curriculum to students. P10 discussed how they utilize realia in the classroom, stating, “As teaching methods, I use a lot of pictures and a lot of real things they can look at, learn. They need as many ways to see something in order for them to succeed.” P2 shared, “I have to physically model because they think sitting back and looking at you like you are a TV is what they’re supposed to do. I have to show them.”

Discourse. The third most significant theme, *discourse*, also discussed student engagement strategies that the participants use to engage students. Of the 20 key phrases, viewpoints, or responses, two (10%) related directly or indirectly to strategies teachers use to engage students, including keywords such as: asking questions and comprehension checks. P4 explained, “I have questioning techniques throughout the lesson that allows for them to discuss parts of my presentation of the topic.” P3 stated, “We have a lot of conversations in the class. There’s a lot of dialogue, not only from me to them, but within themselves. They ask each other questions. They ask me questions.”

Technology. The last theme, *technology*, yielded one (5%) of the 20 key words and phrases for strategies teachers use to engage students. P12 stated, “I am now dabbling into trying to use different apps, internet type things. This is new for me.” It is evident that teachers utilize many different strategies to engage students in the classroom.

Interview question 3. Interview question 3 asked, How does the professional development at your school site help you with student engagement strategies? An analysis of interview question 3 yielded a total of four key words and phrases that were categorized into two different themes. The emerging themes were: (a) no professional development, and (b) constructive professional development (see Figure 3).

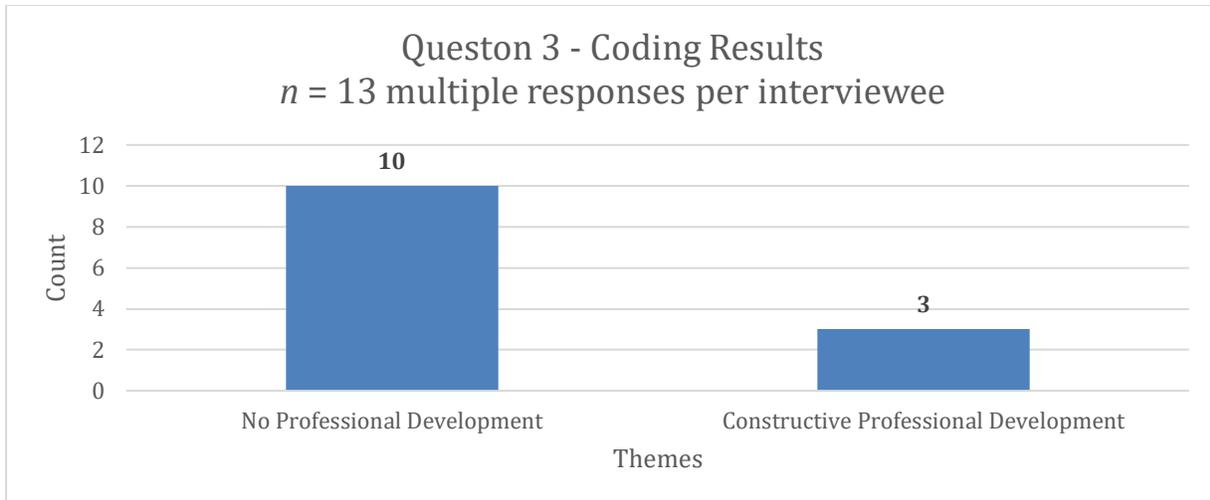


Figure 3. The notable terms referring to professional development. The figure illustrates two themes that emerged from responses to interview question 3. The data is presented in order of frequency in descending order. The numbers for each theme align with the number of responses in which a participant made a direct or indirect statement.

No professional development. Responses to interview question 3 indicated that the majority of the participants are not receiving professional development for student engagement strategies. Of the four key words and phrases, 10 (77%) of the responses collected highlighted that the participants do not receive professional development that aligns with learning about engagement strategies. P2 reported, “I don’t think I’ve ever had a PD that was specific to student engagement. Never.” P6 shared a similar sentiment, stating, “Professional development at my current site currently, there is hardly anything going on in terms of varied groups or engagement strategies. It’s more instructional right now and looking at content areas for development and student achievement.” P3 further confirmed the lack of professional development at her school site, explaining, “Honestly, in my 19 years, I’ve never had professional development at school or offsite that dealt with engaging students.”

Constructive professional development. Of the key words, viewpoints, or responses for interview question 3, three (23%) of the responses were related directly or indirectly to receiving constructive professional development and included codes such as: cognitively guided

instruction, funding for professional development off campus, and technology training. P11 shared, “[The principal] sent us to a couple of conventions and professional development training. She is always open. The school has set aside money for any kind of PD that are not necessarily district given.”

Summary of RQ1. Research question 1 investigated the successful strategies teachers utilize to engage low-income students, or students enrolled in Title I schools. A total of 10 themes were identified by analyzing key phrases, viewpoints, or responses given to three interview questions. The 10 themes were (a) attentive, (b) dedicated, (c) actively engaged, (d) connection to learning, (e) culturally responsive, (f) application, (g) discourse, (h) technology, (i) no professional development, and lastly (j) constructive professional development.

Research Question 2

The second research question asked, What challenges do teachers encounter increasing student engagement? Three interview questions corresponded to research question 2.

1. What obstacles do you face in engaging students?
2. How does the administration at your school site support you with your obstacles?
3. What additional resources would you need to feel better supported in increasing student engagement in your classroom?

The responses to the three interview questions were analyzed for common themes that highlighted the participants’ viewpoints or the challenges teachers encounter in increasing student engagement in the classroom.

Interview question 4. Interview question 4 asked, What obstacles do you face in engaging your students? A comprehensive analysis of the responses to this interview question yielded a total of 23 key words, phrases, and viewpoints, which were coded into four different

themes: (a) student home life, (b) teacher preparation, (c) behavior, and (d) school readiness as the significant obstacles teachers face in engaging students (see Figure 4).

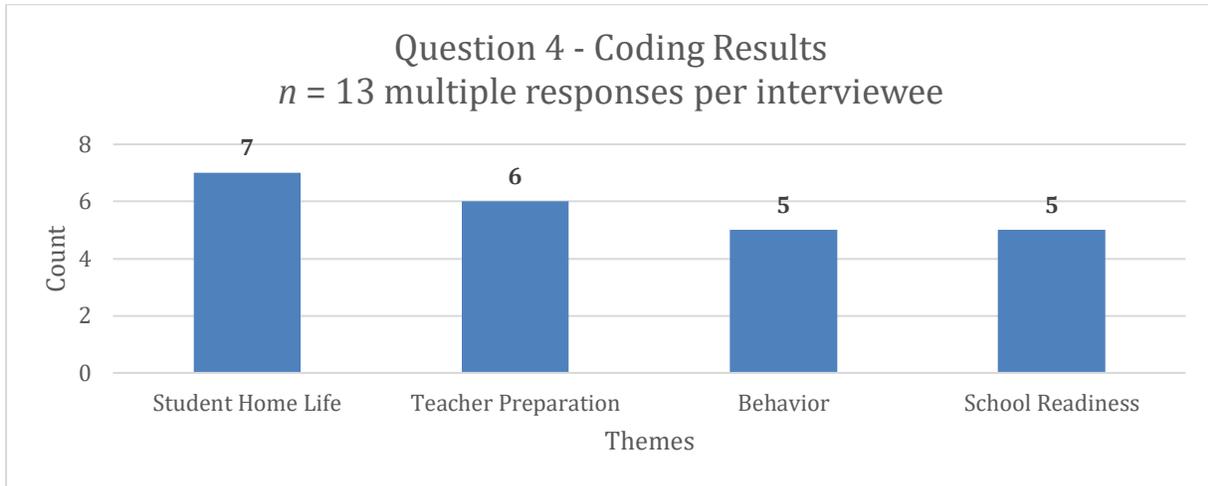


Figure 4. The notable terms referring to obstacles teachers face in engaging students. The figure illustrates four themes that emerged from responses to interview question 4. The data is presented in order of frequency in descending order. The numbers for each theme align with the number of responses in which a participant made a direct or indirect statement.

Student home life. Interview question 4 yielded *student home life* as the most significant theme, with seven (30%) of the key words, phrases, and viewpoints addressing obstacles that teachers face in engaging students. The key words, phrases, and viewpoints included: parent support, home life, poverty, language and vocabulary, no glasses, homelessness, and attendance. P2 shared that “whatever is going on in their home life, the poverty, the lack of parenting, chaos in the house, language, not just second language but that they have no language, that’s the hardest to deal with.” P8 also discussed her obstacles, stating, “Well, one of the main obstacles, of course, is vocabulary, vocabulary development. Of course, the sentence structure, syntax, everything that goes along with the English language.” P5 explained, “There are a lot of obstacles. The parents don’t know how to help. The parents don’t want to help. I don’t get much from the home environment, so that’s a huge obstacle.”

Teacher preparation. *Teacher preparation* was the second most common theme for interview question 4, yielding six (26%) key words, phrases, and viewpoints that illustrated obstacles teachers face in engaging students, including time, grading, preparation, longevity of lessons, time management, and consistency. P4 asserted, “Maybe sometimes not being fully prepared with the lesson, that would interfere. If a lesson I’m presenting is probably dull, I’m not - I mean the obstacle would be me, again, not being fully prepared.” P11 explained another aspect of teacher preparation; “We have a lot of time constraints. That’s our biggest one [obstacle]. So that would be the big one is our time constraint. Lastly, P9 shared, “I feel that most of the time the obstacle is time management.”

Behavior. The third theme that emerged from interview question 4 was *behavior*, yielding five (22%) of the key words, phrases, and viewpoints as a description of obstacles teachers encounter when engaging students. The code words for this theme were complacency, tuning out, violent students, distractibility, and lack of motivation. P12 expressed simply, “Kids tune out.” P13 shared, “I think sometimes there’s a lack of motivation.” P1 voiced her obstacles as, “There’s other kids who, they’re hard to engage because they’re just distractible.”

School Readiness. *School readiness* is the last theme that emerged from interview question 4, generating five (22%) key words, phrases, and viewpoints that exemplified obstacles teachers face when engaging students, such as lack of experiences, learning issues, technology use, lack of interest, and students feeling dumb. P3 clearly stated, “At this point and age, I think it will be technology. I’m competing with gadgets. As soon as they leave my room, they take their phones out and walk home looking at their phones.” P10 expressed that “by the time they get to me in fifth grade, they have been told for however many years that they are just dumb and that’s how it is, so they come in defeated.”

Interview question 5. Interview question 5 asked, How does the administration at your school site support you with your obstacles? An in-depth analysis of responses to interview question 5 yielded a total of 10 key words, phrases, and viewpoints, which were coded into four different themes: (a) responsive, (b) parent engagement, (c) materials, and (d) successful strategies (see Figure 5).

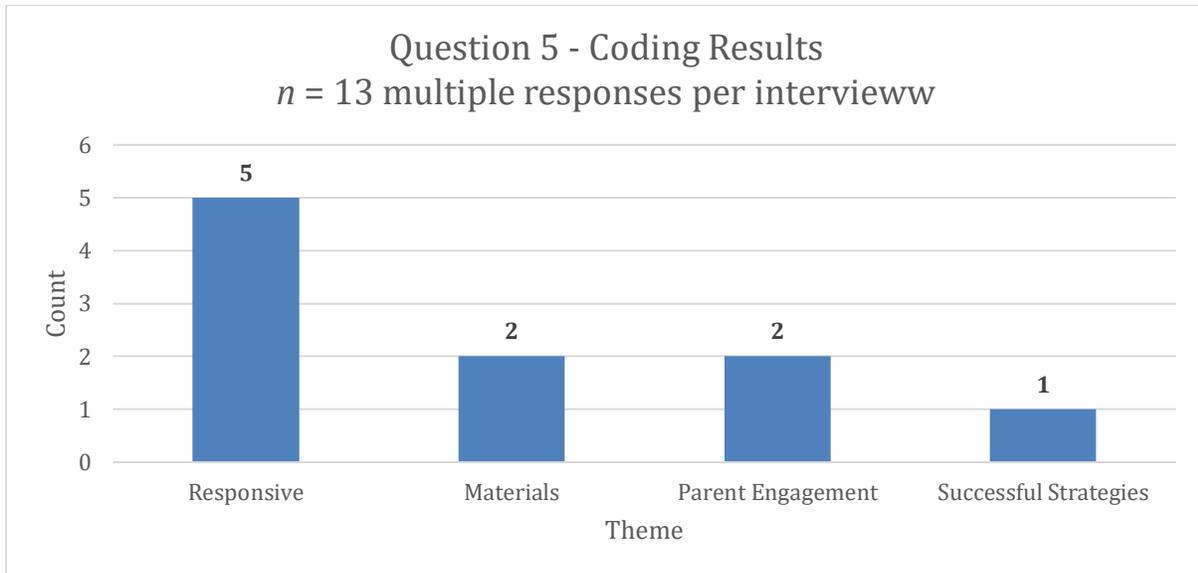


Figure 5. The notable terms referring to how the administration supports teachers with their obstacles. The figure illustrates four themes that emerged from responses to interview question 5. The data is presented in order of frequency in descending order. The numbers for each theme align with the number of responses in which a participant made a direct or indirect statement.

Responsive. Interview question 5 yielded *responsive* as the most significant theme, with five (50%) of key words, phrases, and viewpoints encompassing administration’s support for addressing the obstacles in engaging students. The key words, phrases, and viewpoints included: availability, let me design my classroom, understanding, flexibility, and supportive. P11 shared that,

[Administration] are supportive and I would say the biggest thing is that they understand the fact that we have these time constraints. I think that the support that they give us... they recognize we try our best and try to give the kids as much as we can.

Moreover, P1 articulated that “[Administration] let[s] me design my classroom to be more comfortable and open to personality so that, you know, some kids simply can’t sit in a chair and be engaged.” Lastly, P7 highlighted *responsive* by sharing, “I think that if you need the support, the support is there. I’ve always felt support and [administration] listens to any concerns that I have.”

Parent engagement. Of the 10 key words and phrases for administration support, the second theme, *parent engagement*, yielded two (20%) of the participant responses and included code words such as parent meetings and home life. P5 illustrated administration support, sharing, “I think our administrator does that in coffee with the principal. I think there are topics that he brings up during those monthly meetings about how to engage students, your child, and how to help your child and how much sleep is important.”

Materials. The third theme, *materials*, also yielded two (20%) of the participants’ responses. The key words or phrases corresponding to materials included: paperwork and materials. P13 discussed in her interview that her assistant principal has been supportive, stating, “I went to the AP and said, ‘I don’t know what to do. I’ve never had to teach a kid to read.’ She brought in some more materials for those kids that are slower learners.” Additionally, P3 shared, “I guess, that relationship with my boss that she knows that whatever I ask for [materials] is because I need it and I’m going to use it. My administrator is pretty open and flexible and knows that I have my kids’ best interest in mind.”

Successful strategies. The last theme that emerged for interview question 5 was *successful strategies*. Of the 10 key words, phrases, and viewpoints that emerged in response to this interview question, one (10%) related directly or indirectly to administration support. The Student Success Progress Team meetings (SSPT), run by an administrator, was a coded reference

to the *successful strategies* that administrators employ to support teachers with their obstacles in student engagement. P4 explained,

We have our SSPT program. When I have students that have, where I suspect there might be a situation that a student may be going through or something going on at home that might be interfering, I know that there is someone I can talk to, to discuss possibilities to help the student.

P6 also shared, “If I had a student and I thought that it was a huge obstacle and couldn't be receptive whatsoever, that I could do an SSPT and the [administration] can support me with a particular student or an issue.”

Interview question 6. Interview question 6 asked, What additional resources would you need to feel better supported in increasing student engagement in your classroom? Through the analysis of all the responses to interview question 6, the participants shared a total of 13 key words, phrases, and viewpoints surrounding the additional resources they felt they needed to support student engagement in the classroom. The four themes that emerged were: (a) training, (b) financial, (c) administrative support, (d) personnel, and (e) instructional time (see Figure 6).

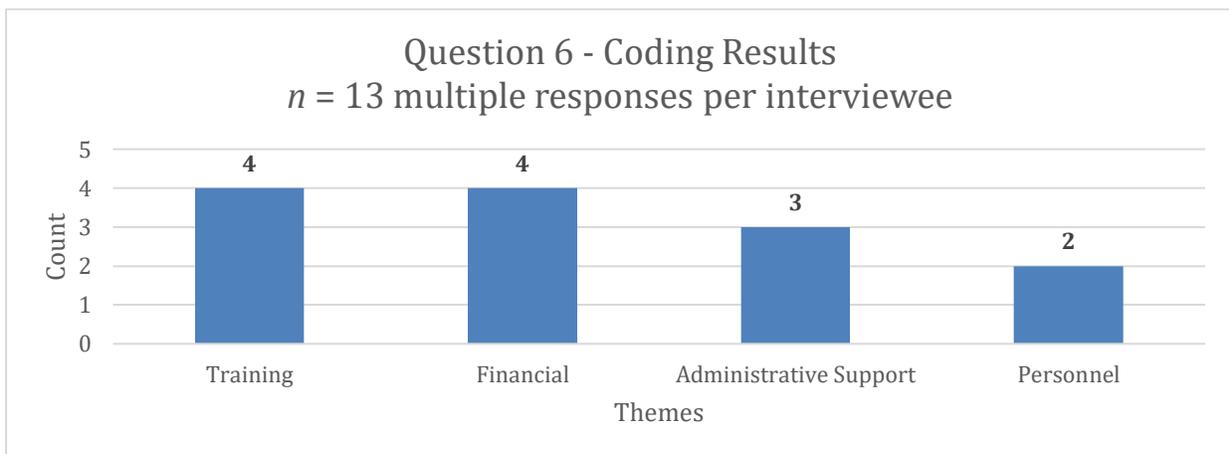


Figure 6. The notable terms referring to additional resources teachers need to feel better supported in increasing student engagement. The figure illustrates four themes that emerged from responses to interview question 6. The data is presented in order of frequency in descending

order. The numbers for each theme align with the number of responses in which a participant made a direct or indirect statement.

Training. Interview question 6 identified additional resources that teachers need in order to feel better supported in increasing student engagement in the classroom. Of the 13 key words, phrases, and viewpoints that emerged in response to this interview question, four (31%) related directly or indirectly to *training* as an additional resource needed, including code words such as professional development, technology training, videos of exemplary lessons, and parent training. P9 discussed a concept they learned in her master's program, *universal design*, and stated, "I would like to know more about how we can incorporate more social emotional learning at our school. I think those are some of the resources that I would like to know more about." P6 also shared that training would be beneficial, asserting,

I was thinking about that [additional resources] and one thing that helps me is every now and then watching videos of other classrooms and what teachers are doing in the classroom. When we do it, a professional development with each other, I don't get as much as when I see a real teacher with a real classroom.

Financial. In addition to training, *financial* emerged as the second theme for additional resources needed. Of the 13 key words, phrases, and viewpoints that emerged in response to this interview question, four (31%) related directly or indirectly to interview question 6 and included code words such as project materials, money, technology programs, and technology devices. P12 clearly stated, "I just wish there were more money to provide those for us [games] premade instead of us having to spend so much time making all of this stuff." Furthermore, P10 expressed,

I don't feel I should have to constantly supply my own technology. That seems like something that should go along with the job. If you want me to teach them, then give me what I need to teach them. Everything I bring is from home.

Administrative support. The third theme that emerged from interview question 6 was *administrative support*. Of the 13 key words, phrases, and viewpoints that emerged in response to this interview question, three (23%) directly or indirectly addressed administrative support as needed and included code words such as connection with parents, better support for troubled students, and flexibility. P7 communicated the need for parent education, stating, "Part of our program, in my particular program, was parents have to come into, serve in the classroom at least once a month, so parent involvement, I wish that kind of thing would be back." P2 expressed, "The kids that are, these violent kids, these kids who have health issues, the undiagnosed kids, something has to happen with that. I need support with that." Lastly, P1 conveyed, "Maybe more of a connection with parents. I mean, I have a connection with my parents, the majority of them, but resources for them."

Personnel. The next theme that emerged for interview question 6 was *personnel*. Of the 13 key words, phrases, and viewpoints that emerged in response to this interview question, two (15%) directly described having more personnel in the classroom as an additional resource that teachers need to feel more supported in increasing student engagement in the classroom. The key phrase for this theme was more adults in the classroom. P13 indicated,

I'd love to have an aide. I know that can't really be in a toolbox that I pull out. It would be really nice to have another adult for any period of time. I would appreciate that. That would be huge.

Additionally, P3 stated,

What I will find helpful is having an extra body. Having of course, not another teacher, but it'll be nice to have a TA for a little bit of time—30 minutes a day will be nice. I don't have anybody. It's me with 30 some kids.

Summary of RQ2. Research question 2 considered the challenges teachers encounter in increasing student engagement. Twelve themes were identified by analyzing key phrases, viewpoints, or responses given to interview questions 4, 5, and 6. The 12 themes were: (a) student home life, (b) teacher preparation, (c) behavior, (d), school readiness, (e) responsive, (f) parent engagement, (g) materials, (h) successful strategies, (i) training, (j) financial, (k) administrative support, and lastly (l) personnel.

Research Question 3

The third research question asked, How do teachers measure success in developing student engagement strategies among low-income students? Two interview questions corresponded to research question 3:

1. How do you measure the level of student engagement in your classroom?
2. How do you track or monitor engagement in your classroom?

Responses to the two interview questions were analyzed for common themes that highlighted the participants' viewpoints on measuring success in developing student engagement strategies among low-income students.

Interview question 7. Interview question 7 asked, How do teachers measure the level of student engagement in your classroom? A comprehensive analysis of the responses to this interview question yielded a total of eight key words, phrases, and viewpoints, which were coded into five different themes: (a) informal, (b) assessment, (c) deliverables, and (d) technology as

the significant tools teachers use to measure the level of student engagement in the classroom (see Figure 7).

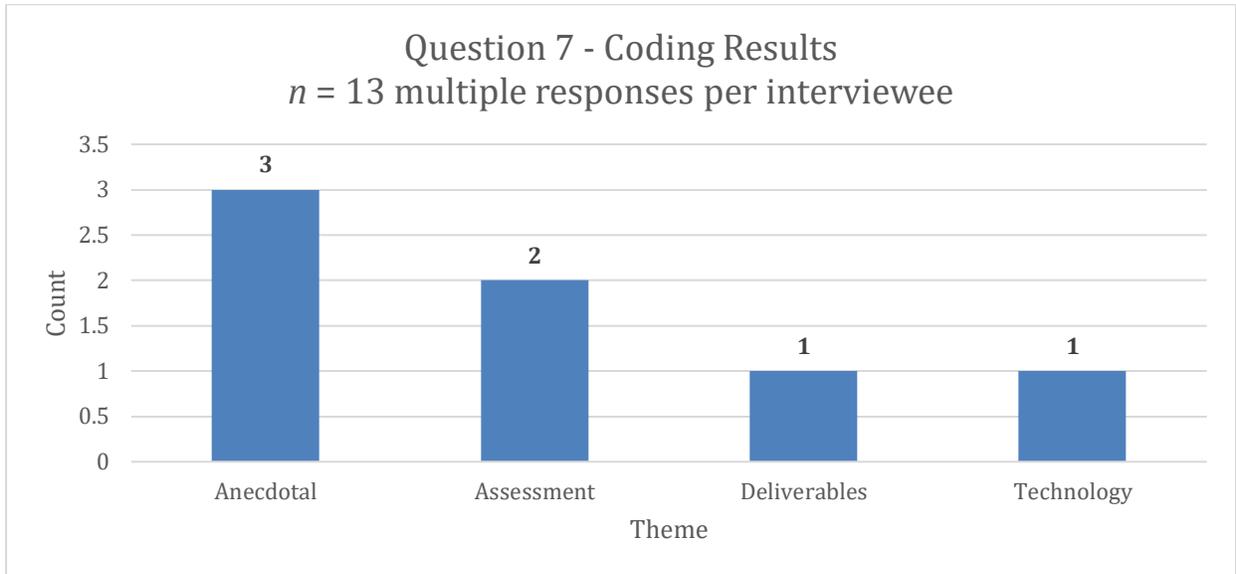


Figure 7. The notable terms referring to how teachers measure success in developing student engagement strategies. The figure illustrates five themes that emerged from responses to interview question 7. The data is presented in order of frequency in descending order. The numbers for each theme align with the number of responses in which a participant made a direct or indirect statement.

Anecdotal. In response to interview question 7, *anecdotal* emerged as the highest-ranking theme regarding how teachers measure the level of student engagement in the classroom, with three (43%) of the key seven words, phrases, and viewpoints directly or indirectly relating to measuring student engagement in the classroom. The code words for this theme were observation, student responses, and participation. P6 expressed, “Student participation, questioning, student participation amongst each other body composure, are their eyes on, are they engaged, are they looking, are they responding to questions, are they on topic?” P12 shared a similar sentiment, stating, “I could visually and physically see that I am losing them. Then I just had to shift gears.” Additionally, P10 indicated, “I’m constantly scanning and checking for interest and that they are looking alive because sometimes, if you’re not, if they’re too far away,

they zone out and don't really, but they know I'm always looking." P9 shared the following story:

But I think that one of the things that I really enjoy hearing is, when I ring my bell and I tell the students, "We are going to lunch," and they say, "What, we are going already?" And you know, time goes by so quickly and when they're engaged and I see it in them, when they're collaborating with each other. So back to the way that I measure their level of engagement is basically through conversations.

Assessment. The second highest-ranking theme for interview question 7 was *assessment*. Of the seven key words, phrases, and viewpoints related to this interview question, two (29%) related directly or indirectly to how teachers measure student engagement. This theme yielded two code words—test scores and informal assessments—as tools teachers utilize to measure student engagement. P5 stated, "Well, some of it [measuring student engagement] is their scores. When we do our testing, progress monitoring, I can tell who's not getting it and who I'm red flagging in the class."

Deliverables. The third ranking theme for interview question 7 was *deliverables*, and of the seven key words, phrases, and viewpoints related to this interview question, one (14%) related directly or indirectly to how teachers measure student engagement. The code word for this theme was projects. P4 indicated,

When the students are able to produce a final project that may be expected of them, and they are able to maybe even compare with a classmate and talk about it. Their final answer, some are able to come up with an answer, some are not, but being able to discuss how they came about it requires that they'd be engaged. To me, that's a way to gauge it.

Technology. The fourth and last theme for interview question 7 was *technology*. Of the seven key words, phrases, and viewpoints related to this interview question, one (14%) related directly to technology, citing Class Dojo as a tool that is used to measure student engagement. Class Dojo is a computer-based behavior management program that teachers use to gather points for students' positive behaviors and take points away for their negative behaviors (Krach, McCreery, & Rimel, 2016). P3 stated,

I use Class Dojo for everything in my classroom and within that, I give points all day for classroom participation, for asking a question, for answering a question, for giving praise to a classmate, for complimenting somebody, for being helpful, for everything in class. I do give points, but I don't penalize the kids that don't [answer questions].

Interview question 8. Interview question 8 asked, How do you track or monitor engagement in your classroom? A comprehensive analysis of the responses to this interview question yielded a total of 11 key words, phrases, and viewpoints, which were coded into five different themes regarding the significant methods teachers use to track or monitor student engagement: (a) formal notes, (b) informal, (c) reflective practice, (d) technology, and (e) none (see Figure 8).

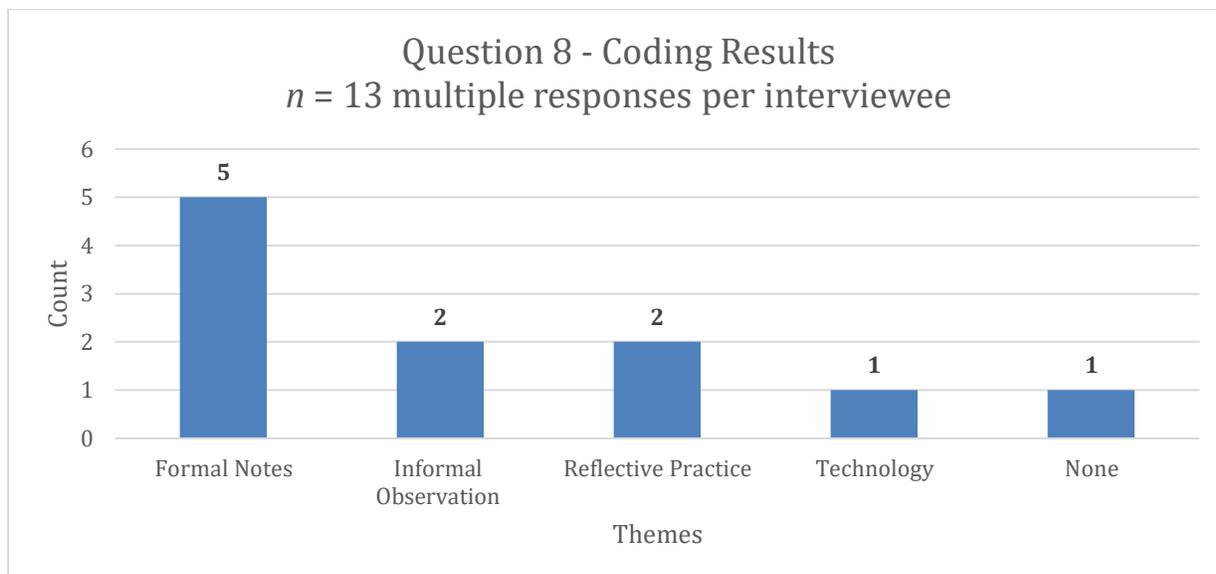


Figure 8. The notable terms referring to how teachers track or monitor the level of engagement in the classroom. The figure illustrates five themes that emerged from responses to interview question 8. The data is presented in order of frequency in descending order. The numbers for each theme align with the number of responses in which a participant made a direct or indirect statement.

Formal notes. Interview question 8 revealed *formal notes* as the highest-ranking theme for how teachers track or monitor student engagement in the classroom. Of the 11 key words, phrases, and viewpoints related to this interview question, five (46%) related directly or indirectly to formal note taking and included the code words spreadsheets, logs, checklists, annotations, and notes. P10 simply stated, “Writing notes in a book, keeping track.” P5 provided an in-depth analysis of the theme of formal notes, communicating,

I have lots of spreadsheets and I have the kids’ names. Most of the time, it’s quiet and it’s something I can just write on a piece of paper. Sometimes I have specific kid’s initials on the board and I tally how many times they’re talking and how many times they are engaged in my discussions.

P9 reported using checklists, stating, “I usually have a checklist, I walk around with a clipboard. And on that clipboard, I have their names and then I have annotations, I can write something as, you know, ‘Susan was asking clarifying questions.’”

Informal observation. The second highest ranked theme for interview question 8 was *informal observation*, and of the 11 key words, phrases, and viewpoints related to this interview question, two (18%) related directly or indirectly to informal observation as an emerging theme for tracking or monitoring student engagement. The code words for this question were observation and reading the room. P1 illustrated how they informally track and monitor student engagement, stating, “I only do informal observational. I don’t write it down.” P8 also shared, “I really let them know that I expect them to pay attention and if they’re not paying attention, I will remind the class and I read the room to track engagement.”

Reflective practice. *Reflective practice* yielded the same ranking as informal observation, and of the 11 key words, phrases, and viewpoints related to this interview question, two (18%) of the responses related directly or indirectly to tracking or monitoring engagement. The code words for reflective practice were reflective and internally. P13 explained her reflective practice, sharing,

I’m fairly reflective by nature. I keep a lot of notes. I’m good about - I go back and reread my notes to myself because I don’t want the same things to occur again if they didn’t go well, or if they did go well, I do want it to occur again. I’m pretty reflective.

Technology. Technology and no formal notes were the fourth and fifth themes that emerged from interview question 8, both yielding one (18%) of the responses directly or indirectly relating to how teachers track or monitor student engagement. The key word that was coded for *technology* was Class Dojo Reports. P3 shared.

I want to go back to Class Dojo because it has reports. At the end of the month, the kids can see their points, the parents can see their points, but at the end of the month, we go over how many points they have.

P11 also uses Class Dojo to monitor and track and engagement and stated simply, “Class Dojo.”

None. The last theme, none, refers to teachers not utilizing tracking or monitoring methodology to document student engagement. The key word for this theme was *none*. P6 communicated, “I don’t have a log and I don’t keep track. I don’t have a system where I track how engaged the students were today.”

Summary of RQ3. Research question 3 addressed the tracking or monitoring strategies teachers use to monitor student engagement. Nine themes were identified by analyzing key phrases, viewpoints, or responses that emerged in response to interview questions seven and eight. The nine themes—(a) informal, (b) assessment (c) deliverables, (d) formal notes, (e) informal, (f) reflective, (g) none, and (h) technology—emerged in response to interview questions seven and eight, referring to how teachers measure the level of student engagement and track or monitor engagement in the classroom.

Research Question 4

The fourth and last research question asked, What recommendations would teachers provide to incoming teachers to promote a high level of engagement among low-income students? Three interview questions corresponded to research question 4:

1. If a new teacher approached you and asked what is a successful strategy in engaging students living in poverty, what would you say?
2. What other advice would you give to a novice teacher at a Title I school with regard to student engagement?
3. Is there anything else you would like to add?

The responses from the three interview questions were analyzed for common themes that highlighted the participants' viewpoints regarding recommendations teachers have for promoting a high level of engagement among low-income students.

Interview question 9. Interview question 9 asked, If a new teacher approached you and asked what is a successful strategy in engaging students in poverty what would you say? A comprehensive analysis of responses to this interview question yielded a total of 18 key words, phrases, and viewpoints, which were coded into five different themes: (a) intentional, (b) compassion (c) technology (d) mindfulness, and (e) persevere (see Figure 9).

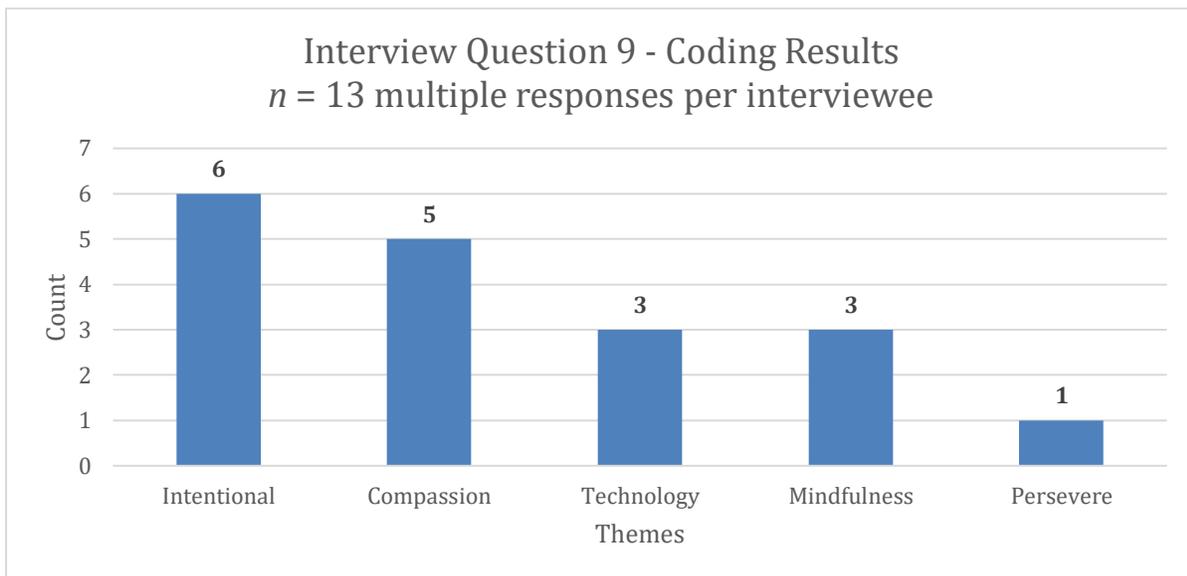


Figure 9. The notable terms referring to what successful strategies teachers employ to engage students living in poverty. The figure illustrates five themes that emerged from responses to interview question 9. The data is presented in order of frequency in descending order. The numbers for each theme align with the number of responses in which a participant made a direct or indirect statement.

Intentional. In response to interview question 9, *intentional* emerged as the highest-ranking theme for successful strategies for new teachers with regard to student engagement. Of the 18 key words, phrases, and viewpoints that emerged in response to this interview question, six (33%) related directly or indirectly to successful strategies, including: make instruction relevant, exposure, high expectations, praise students, time management, and behavior in class.

P4 shared her thoughts on the importance of being intentional, stating, “Well, allowing them an opportunity to talk allowing them an opportunity to speak their mind, but give them guidance to do it correctly in an academic setting.” Furthermore, P10 expressed, “I always tell them that the first thing they have to do is get that management under control. If they've got some good management going on, they'll be able to see to their needs.”

Compassion. *Compassion* was the next highest-ranking theme addressing the strategies experienced teachers would recommend to a new teacher. Of the 18 key words, phrases, and viewpoints that emerged in response to this interview question, five (28%) related directly or indirectly to compassion, including: parental, relationships, connect with parents, connect with students, and be respectful. P6 communicated that they were recently talking to a new teacher and said, “We’re mothers and we’re mothering these children as well. They’re coming without things that we take for granted.” P11 also discussed the theme of compassion, stating, “Make a connection with students. If you’re interested in what they’re interested in, or you talk to them, and you have some kind of personal relation with them, they're going to respond better to you.” Lastly, P7 shared his point of view thusly:

What I would suggest to that person is do what I guess I detailed, in reaching out to the parent and making the connection with them so that you gain them as partners in the idea that you're going to work together for the benefit of the student in the emotional, social and in the academic sense.”

Technology. The third theme, *technology*, also illustrated successful strategies that experienced teachers would recommend to new teachers to engage students. Of the 18 key words, phrases, and viewpoints that emerged in response to this interview question, three (17%)

related directly or indirectly to technology, including: virtual field trips, utilize technology, and Class Dojo. P1 discussed the importance of exposure, sharing,

Exposing them to things that they might not be exposed to because they get wowed easier than maybe people who aren't living in poverty, who haven't seen, you know, like a virtual field trip or letting them use technology. They get very excited.

P3 also described technology as a way to engage students, stating, "I use Class Dojo, which is individual and things that they earn on their own. They get different points with different activities during the day."

Mindfulness The next highest-ranking theme for interview question 9 was *mindfulness*. Of the 18 key words, phrases, and viewpoints that emerged in response to this interview question, mindfulness yielded the same number of responses as technology. Three (17%) of the responses related directly or indirectly to mindfulness and included: start where the kids are, know the students, and basic needs are met. P13 indicated the importance of mindfulness, stating, "I'd say first, get to know them [students], build those relationships and find out what motivates them." P8 shared a different perspective on mindfulness, communicating, "I would say that never lower your expectations for what each student is capable of." Additionally, P2 simply stated, "Start where they are. Start where the kids are."

Persevere. The last theme that emerged for interview question 9 was *persevere*. Of the 18 key words, phrases, and viewpoints that emerged in response to this interview question, one (5%) related directly to the importance of perseverance. The key phrase for this theme was don't give up. P5 stated,

Don't give up. These kids deserve you. Just because they come from no money, or a broken home, they deserve the best education they can get. It's going to be hard. It's going to be really hard. Find a way to get progress, not a benchmark, and don't give up.

Interview question 10. Interview question 10 asked, What other advice would you give to a novice teacher at a Title I school with regard to student engagement? A comprehensive analysis of responses to this interview question yielded a total of 16 key words, phrases, and viewpoints, which were coded into five different themes: (a) relationships, (b) deliberate, and (c) active participant (see Figure 10).

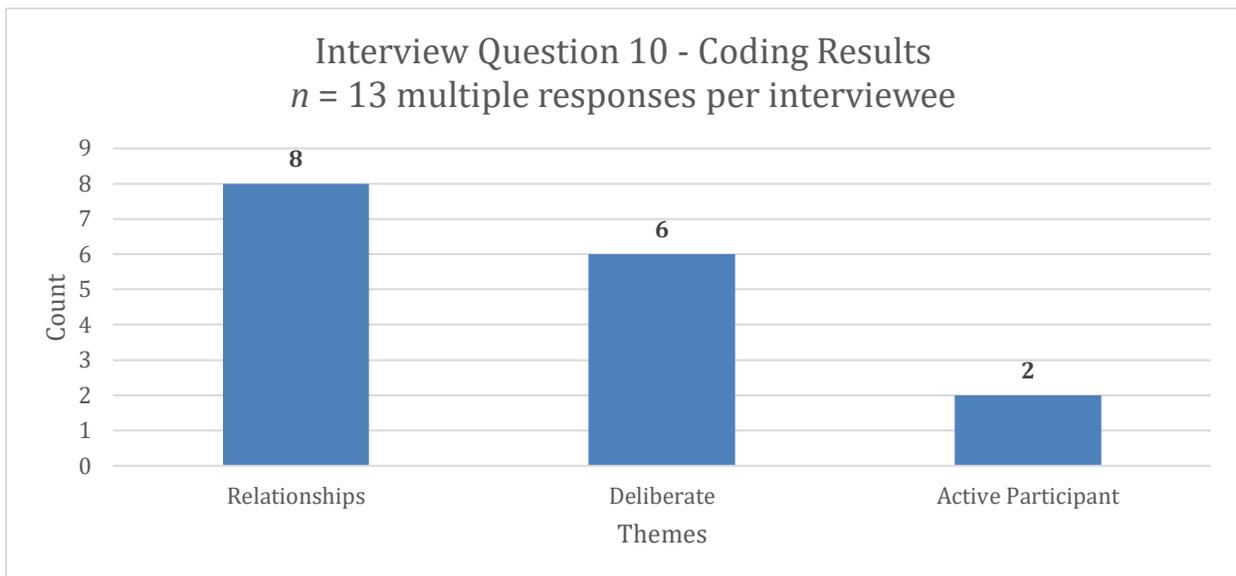


Figure 10. The notable terms referring to what additional advice teachers would to a novice teacher at a Title I school with regard to student engagement. The figure illustrates three themes that emerged from responses to interview question 10. The data is presented in order of frequency in descending order. The numbers for each theme align with the number of responses in which a participant made a direct or indirect statement.

Relationships. *Relationships* emerged as the highest-ranking theme for interview question 10. Of the 16 key words, phrases, and viewpoints that emerged in response to this interview question, eight (50%) related directly or indirectly to additional advice teachers would give to a novice teacher to further engage students, including: care about the students, be sensitive about the questions you ask, involvement, be personal and share stories, know your

students, be respectful to parents, be mindful of peer pressure, and provide multiple opportunities. P6 explained that they recently told a new teacher; “You’ve got to reach out. Get deep into their little hearts. You’ve got to remind them they’re loved here. No matter what happens, I’m here for you and I’m always thinking of you.” P1 shared a different point of view with regard to relationships, stating, “You know, be careful when you’re asking [students] about what they did over the break or the summer, because they can be sensitive.” Furthermore, P3 indicated, “I wanted to end it [the interview] with caring. If you let your kids know and you show them that you care, they’ll do whatever you want. Even the most difficult child.”

Deliberate. The next highest-ranking theme for interview question 10 was *deliberate*. Of the 16 key words, phrases, and viewpoints that emerged in response to this interview question, six (38%) indicated that being deliberate is a successful strategy for engaging students. The code words or phrases that were cited included pause instruction when necessary, check in on kids, responsible for learning, use curriculum as a guide, try your best, and ask for things that you need. P11 explained that there is a new teacher at the grade-level team and recommended, “You’re not going to get through the lessons. Don’t stress about making sure you hit all the standards. And that’s not the reality. You try your best. Just try your best.” P9 highlighted the importance of being deliberate, stating, “I think that the advice I would give them is that the curriculum that is given to us is there as a guide. It’s not meant to be followed word by word because every classroom has different needs.” Lastly, P2 shared, “I think checking on kids frequently, don’t be afraid to stop. Don’t just keep going. If you see something is not looking right in your kids, then you have to think about what that is.”

Active participant. The last theme, *active participant*, was linked to the following code words or phrases: discussions and keep them involved. Of the 16 key words, phrases, and

viewpoints that emerged in response to this interview question, two (12%) were related directly or indirectly to ensuring active participation in the classroom. P4 communicated, “Don’t just lecture. Have students move. Have students talk. Have students do hands-on. I think that is so important.” In closing, P10 explained, “I mean, it’s just always keep them involved. Let them be part of the decision making. Let them be part of the rulemaking. Let them be part of anything you do because it’s more like back to being family.”

Interview question 11. Interview question 11 asked, Is there anything else you would like to add? A comprehensive analysis of the responses to this interview question yielded a total of 13 key words, phrases, and viewpoints, which were coded into three different themes:

(a) nothing to add, (b) challenges, and (c) closing thoughts (see Figure 11).

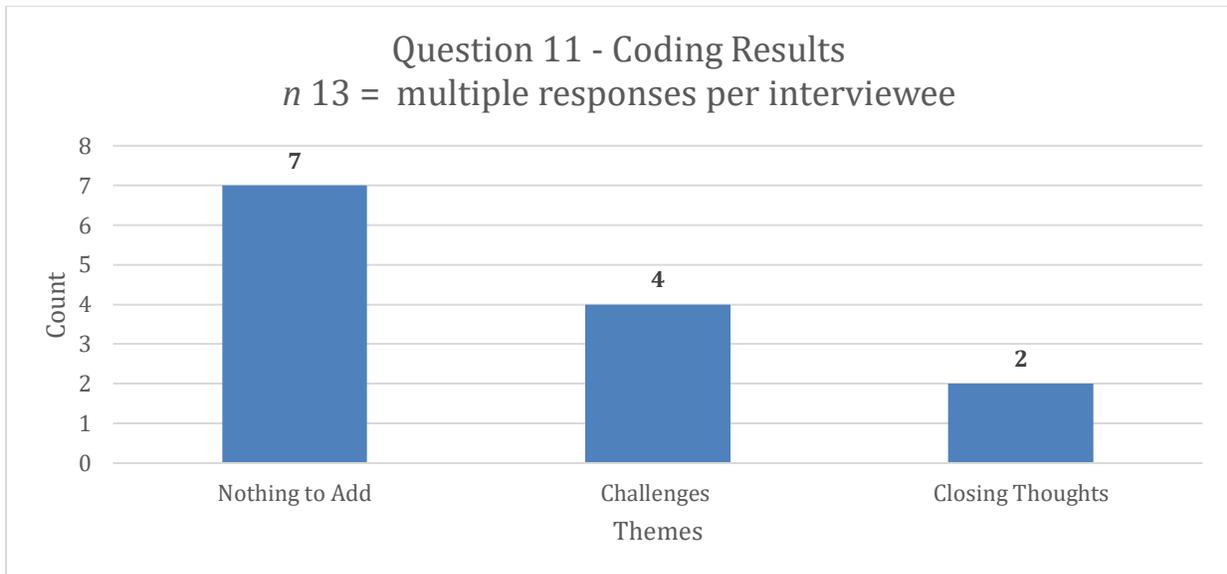


Figure 11. The notable terms referring to anything else the participants wanted to add. The figure illustrates three themes that emerged from responses to interview question 10. The data is presented in order of frequency in descending order. The numbers for each theme align with the number of responses in which a participant made a direct or indirect statement.

Nothing to add. The highest-ranking theme for interview question 11 was *nothing to add*.

Of the 13 key words, phrases, and viewpoints that emerged in response to this interview

question, seven (54%) indicated that the participant had nothing to add. P2 said, “I think that’s it.” P9 answered the question and said, “No I don’t.” P3 added, “No. Good luck on your paper.”

Challenges. The next highest-ranking theme for the last open-ended question was *challenges*. Of the 13 key words, phrases, and viewpoints that emerged in response to this interview question, four (31%) related directly or indirectly to additional challenges that the participants wanted to share. The key words or phrases were: it’s a hard job, district issues, and can’t do enough. P8 explained,

I think teachers have no idea of the peer pressure that goes along amongst students in the classroom. We have no idea, I think, what goes on with our students. Everyone is valuable in the classroom and that the students don’t have the stress in the room because it’s hard sometimes for teachers to know what is going on.

P12 articulated a different challenge:

I don’t know. I guess it just feels like one cannot, you can never do enough and that’s frustrating. I guess part of the whole job is constantly questioning and thinking, am I doing enough. What else can I do differently? What can I add? What can I change?

Closing thoughts. The last theme was *closing thoughts*. Of the 13 key words, phrases, and viewpoints that emerged in response to this interview question, two (15%) related directly or indirectly to closing thoughts participants wanted to add to end the interview, including: visuals and home away from home. P4 shared, “[Make] sure that they have visuals. I think that’s a very big deal.” They continued by stating, “[Keep] them engaged, [walk] around, I think that’s important and also [give] the kids the opportunity to speak.” P7 expressed,

This [school] is my home away from home. Twenty-three years here, I mean, it's a great place to work. I've had my ups and downs here with different principals and stuff coming in. For the most part, it's been a great, great place. Yes. It's home away from home.

Summary of RQ4. Research question 4 addressed the advice that experienced teachers would give to novice teachers to help them engage students who live in poverty. Eleven themes were identified by analyzing key phrases, viewpoints, or responses given to interview questions 9, 10, and 11: (a) intentional, (b) compassion, (c) technology, (d) mindfulness, (e) persevere, (f) relationships, (g) deliberate, (h) active participant, (i) nothing to add, (j) challenges, and (k) closing thoughts.

Chapter 4 Summary

The purpose of the study was to determine the best instructional practices of exemplary teachers to engage students who live in poverty, to explore the challenges teachers face in engaging students from poverty, and to gather the recommendations experienced teachers have to offer new teachers to promote a high level of engagement among low-income students. To accomplish this task, 13 experienced teachers teaching in Title I schools were recruited. All participants were asked the same 11 open-ended interview questions designed to answer the four research questions.

1. What successful strategies are teachers using to support student engagement among low-income students?
2. What challenges do teachers encounter in increasing student engagement?
3. How do teachers measure success in developing student engagement strategies among low-income students?

4. What recommendations would teachers provide to incoming teachers to promote a high level of engagement among low-income students?

Data for this study were collected by conducting 13 semi-structured interviews. The interviews were recorded, transcribed, and then coded. The themes and codes were validated by employing an inter-rater review process. Furthermore, the phenomenological approach was utilized to analyze the data; this process was explained in detail in Chapter 3. The data yielded 43 themes. Table 5 provides a summary of the data, including each research question and the corresponding themes. Chapter 5 presents a discussion of themes, implications, recommendations, and conclusions of the study.

Table 5

Summary of Themes for the Research Questions

RQ1. What successful strategies are teachers using to support student engagement among low-income students?	RQ2. What challenges do teachers encounter in increasing student engagement?	RQ3. How do teachers measure success in developing student engagement strategies among low-income students?	RQ4. What recommendations would teachers provide to incoming teachers to promote a high level of engagement among low-income students?
Attentive	Student Home Life	Anecdotal	Intentional
Dedicated	Teacher Preparation	Assessment	Compassion
Actively Engaged	Behavior	Deliverables	Technology
Connection to Learning	School Readiness	Technology	Mindfulness
Culturally Responsive	Responsive	Formal Notes	Persevere
Application	Parent Engagement	Informal Observation	Relationships

(continued)

RQ1. What successful strategies are teachers using to support student engagement among low-income students?	RQ2. What challenges do teachers encounter in increasing student engagement?	RQ3. How do teachers measure success in developing student engagement strategies among low-income students?	RQ4. What recommendations would teachers provide to incoming teachers to promote a high level of engagement among low-income students?
Discourse	Materials	Reflective Practice	Deliberate
Technology	Successful Strategies	Technology	Active Participant
No Professional Development	Training	None	Nothing to Add
Constructive Professional Development	Financial		Challenges
	Administrative Support		Closing Thoughts
	Personnel		

Note. This table presents a summary of all the themes derived through the data analysis process.

Chapter 5: Conclusions and Recommendations

It can be challenging to engage students who live in poverty: a group to which school systems in America are consistently failing to provide quality educational opportunities (Connell, 1994; Hirn et al., 2018; Murnane, 2007). Furthermore, it is believed that California has the highest percentage of students who live in poverty (Wade, Rasmussen, & Fox-Tumbell, 2013), and when educators employ pedagogical practices that incorporating behavioral engagement, emotional engagement, and cognitive engagement strategies, students' educational outcomes improve (Appelton et al., 2009; Moreira et al., 2018; Skinner et al., 2009).

It is the researcher's hope that the findings of this study will contribute to the existing literature by identifying best practices of student engagement for all teachers and ultimately provide educators with a deeper understanding of the impact poverty has on learning. Furthermore, this study aims to analyze the successful strategies teachers are using to engage students, understand the challenges that teachers face, and, more importantly, provide a model that can be used across school districts in the United States to improve educational systems throughout the county. It is hoped that this model will serve as a training program for educational leaders, and by identifying best practices for student engagement, the dropout rate will decrease and more children living in poverty will have successful outcomes in school and life.

Summary of the Study

The purpose of this study was to determine the best practices of exemplary teachers in engaging students who live in poverty. Influenced by the literature review, four research questions and 11 open-ended interview questions were developed to inform this study. Furthermore, this study was qualitative in nature, using the phenomenological approach. The phenomenological approach was selected to "elicit stories" (Grossoehme, 2014, p. 110) from the

participants. According to Creswell (2018), a phenomenological study “describes the common meaning for several individuals of their lived experiences of a concept or a phenomenon” (p. 75).

Participants were recruited by utilizing the Local District A directory, which provided the researcher with the names of schools in a localized region of USD. A sample of 13 participants was identified for the study, all of whom have taught between 6-31 years. All participants also had experience teaching in high-poverty schools. Furthermore, the participants had to be willing to be interviewed either face-to-face or virtually and agree to be recorded. Lastly, the criteria for maximum variation were used to include participants from different Title I elementary schools in a specific region in USD.

Data were collected for this study through semi-structured interviews with 13 participants. The participants were asked 11 open-ended questions that were developed and validated through interrater and validity procedures utilizing techniques such as (a) *prima facie* validity, (b) peer-review validity, and (c) expert review (see Appendix D). Each interview was recorded and saved on a USB drive, and an outside agency transcribed the interviews using a 256-bit encrypted hard drive, wiping the files with extra washings to ensure that the transcriptions could not be retrieved. The data were then analyzed and coded to develop emerging themes, and the interrater review process was implemented to ensure the reliability of the data. Following the interrater review process, the findings of the study were summarized in 11 bar graphs, summarizing of the data for each interview question, which described key phrases, viewpoints, and responses from each participant.

Discussion of Findings

The following section will provide further discussion of the leading themes derived from interview responses. Moreover, the findings are compared to the existing literature to confirm whether the interviewee responses concur with, contrast to, or contribute to the literature on engaging students who live in poverty. The findings of this study identify key best practices that teachers can employ to engage students who live in poverty.

Results for RQ1. RQ 1 asked, What successful strategies are teachers using to support student engagement among low-income students? For RQ1, the overall themes are described in Figure 12.

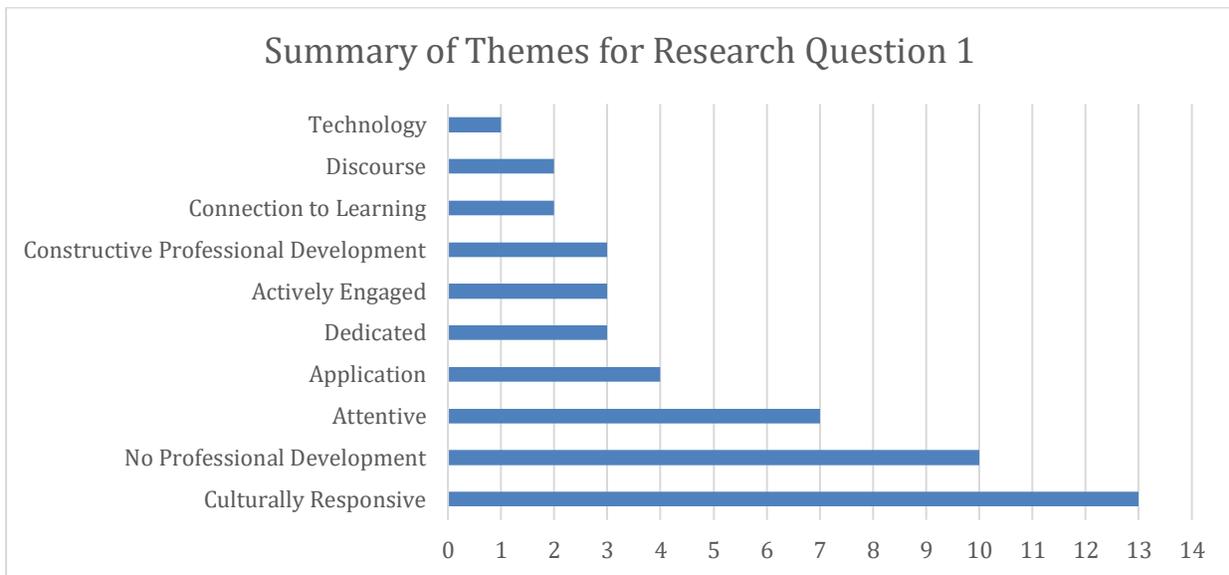


Figure 12. Summary of the themes derived from the analysis of RQ1. The themes are presented in descending order.

Participants defined student engagement, sharing the strategies they employ to engage students, and whether or not they are receiving professional development to further learn how to engage students. Interview responses related to RQ1 identified the following:

- Teachers do not have the theoretical framework for student engagement.
- Teachers employ a variety of strategies to engage students.

- There is a limited amount of professional development to support teachers' knowledge in pedagogical practices for engaging students.

Discussion of RQ1. The purpose of this research question was to determine if the participants had a clear understanding of student engagement, the strategies that they employ to engage students, and lastly if they are receiving professional development to support their understanding of student engagement. It is evident that the teachers do not have an understanding of the theoretical framework for student engagement. The themes that emerged for RQ1 were connection to learning, actively engaged, dedicated, and attentive. Research indicates that student engagement incorporates three dimensions: behavioral engagement, affective engagement, and cognitive engagement. Behavioral engagement refers to student conduct (Finn & Rock, 1997) and the ability to concentrate and pay attention during class discussions (Birch, & Ladd, 1997). Behavioral engagement also includes the extent to which a student is involved in school (Finn et al., 1995).

Secondly, affective engagement refers to how a student feels about school and includes a sense of belonging in the school community (Finn, 1989). It is also essential to consider that peer relationships and having close relationships with teachers is an integral component of student engagement at the affective level (Birch & Ladd, 1997; Ruzek et al., 2016; Yang et al., 2018). The last dimension of student engagement, cognitive engagement, acknowledges the self-regulatory strategies students utilize to organize and monitor their learning; researchers have defined cognitive engagement as a deliberate investment in learning (Ablard & Lipschultz, 1998; Fredricks et al., 2004; Pintrich & De Groot, 1990). Furthermore, cognitive engagement refers to how students struggle to understand academic content, and students who are cognitively engaged

employ a variety of tools to understand the content, thereby influencing academic achievement (Archambault & Dupere, 2016; Rotgans et al., 2018).

Participants defined student engagement as both actively engaged and attentive (behavioral engagement) and connected to learning and dedicated (affective engagement); however, despite the wealth of literature emphasizing the significance of cognitive engagement, teachers in this study did not consider the importance of cognitive engagement. In order for students to engage fully in school, teachers must understand the importance of cognitive engagement and provide students with a variety of strategies to access the academic content, further promoting academic achievement. Additionally, Skinner and Pitzer (2012) emphasized the importance of cognitive engagement, describing willing participation, thoroughness, and strategy search as a few of the components necessary for students to engage cognitively in school. Another key point to consider is that when tasks are authentic, challenging, relevant, hands-on, heads-on (cognitively engaging), and integrated throughout the content area, students are intrinsically motivated to learn and are more engaged in school (Skinner & Pitzer, 2012). It is evident that teachers would benefit from professional development that emphasizes the three dimensions of student engagement and offers strategies to implement at all levels of engagement; behavior, affective, and cognitive engagement. Doing so will improve educational outcomes.

The second finding for RQ1 is that teachers are utilizing a variety of strategies to engage students. Research confirms that adopting responsive pedagogy to teach culturally diverse students helps to close the achievement gap (Finn & Rock, 1997; Hernandez, 2011; Hirn et al., 2018; Murnane, 2007; Santamaria, 2009). All participants in this study reported a variety of culturally responsive strategies that they are utilizing to engage students, including music, think-pair-share, conversations, and working in groups. Furthermore, cooperative learning is one of the

more effective research-based strategies highlighting culturally responsive pedagogy (Gillies & Boyle, 2010; Tsay & Brady, 2010). Additional literature emphasizes that student engagement also increases during cooperative learning (Emmer & Gerwels, 2002; Gillies, 2014; Gillies & Boyle, 2010; Herrmann, 2013; Johnson & Johnson, 2009; Neutzling et al., 2019; Swanson et al., 2017). It is evident that the participants in this study employ a few strategies such as working in groups and think-pair-share to promote cooperative learning in the classroom. Furthermore, utilizing technology, modeling, realia, asking questions, and comprehension checks also align with effective strategies that teachers use in the classroom to engage students.

To conclude the discussion for RQ1, it is evident that teachers are not receiving professional development to learn how to engage students in the classroom. Although the teachers are utilizing strategies to engage students, it is unclear if the teachers are intentionally employing strategies to increase student engagement for students who live in poverty. Professional development is defined as intentional, systematic learning opportunities for teachers to change their behavior, shift their principles, and utilize new teaching techniques to benefit students' outcomes (Kalinowski et al., 2019; Kirkpatrick & Kirkpatrick, 2007; Wassermann, 2009). Furthermore, additional research indicated that the goal of professional development is to teach strategies that increase teachers' knowledge, capabilities, and effectiveness in teaching, shifting teaching practices to improve academic achievement for students (Miguel, 2019). Teachers could benefit from professional development that directly connects characteristics of students who live in poverty and strategies that will improve instructional practice.

Results for RQ2. RQ2 asked, What challenges do teachers encounter increasing student engagement? Participants discussed the obstacles they face in engaging students, how the

administration helps teachers with their obstacles, and what additional resources teachers need to feel supported in engaging students. For RQ2, the overall themes are described in Figure 13.

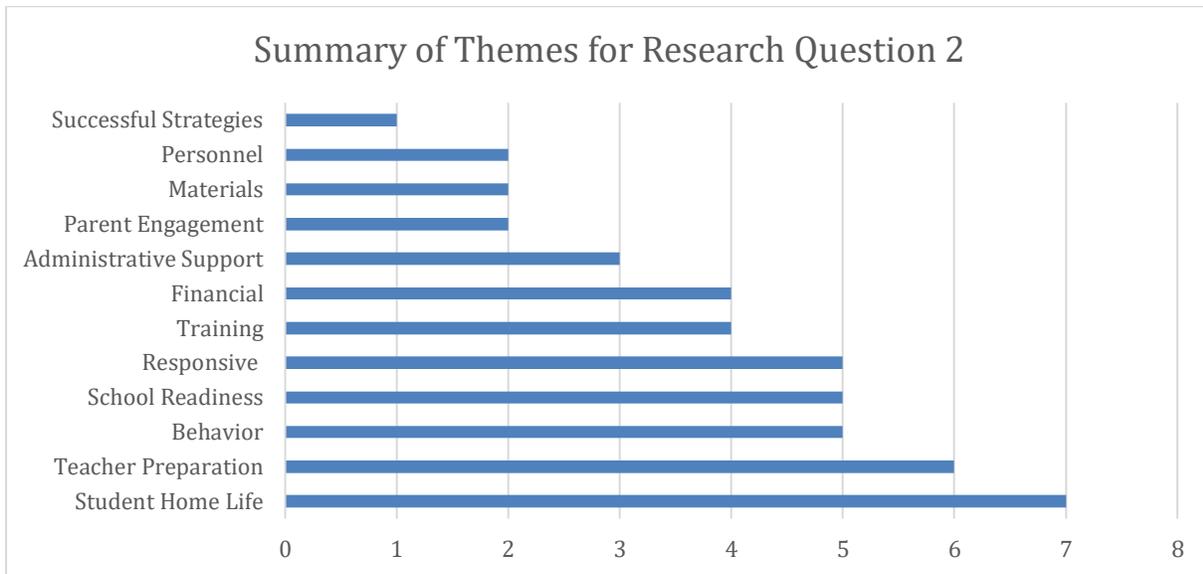


Figure 13. Summary of the themes derived from the analysis of RQ2. The themes are presented in descending order.

Results related to RQ2 were as follows:

- Teachers face obstacles in engaging students that directly align with the characteristics of students who live in poverty.
- Administrators are supportive.
- Training is needed for teachers to feel better supported.

Discussion of RQ2. The purpose of this research question was to determine the obstacles teachers face in engaging students, to determine if administrators support them in navigating those the obstacles, and to identify the additional resources teachers need to feel better supported in engaging their students.

To begin the discussion for RQ2, it is essential to discuss the research on poverty and academic implications thereof. Research confirms that students living in poverty have language deficits, underdeveloped social skills, emotional issues, and additional stressors and health

concerns; as a result, many such students fall behind in school (Hernandez, 2011; Hirn et al., 2018; National Education Association [NEA], 2016). Further research delineated seven key differences between students in poverty and middle-class students: health and nutrition, vocabulary, effort, hope, cognition, relationships, and distress (Jensen, 2013b). It is evident from the analysis of responses to interview question 2 that the teachers in this study are struggling with the defining characteristics of students who live in poverty; their biggest obstacles included home environment life, language and vocabulary, and parent support. Further implications from this discussion on RQ2 will be presented later in this chapter.

The second noted theme related to RQ2 spoke to the importance of administrative support. All participants shared that their administrators are supportive. The literature described common characteristics of 90/90/90 schools: schools in which 90% of the students are living in poverty, 90% of the students are non-White, and 90% of the students are achieving at a minimum of 90% on standardized assessments (Reeves, 2000). Furthermore, Kearney et al. (2012) discussed specific qualities of 90/90/90 schools, highlighting support structures, delivery of effective professional development, and the importance of highly effective leadership. Although the teachers in this study were not from 90/90/90 schools, the findings from the studies identify administrative support as a key predictor for schools' academic success. The teachers in this study feel supported by the administration, confirming the findings of the literature.

Lastly, the findings from RQ2 highlighted that the participants in this study are not receiving training to increase student engagement in the classroom. The literature confirms the consequences of not receiving professional development, as mentioned previously, and although professional development does not provide teachers with all of the solutions to situational classroom issues, staff development does provide opportunities for critical reflection to benefit

teaching practices (Rolheiser & Stevahn, 1998). Additional professional development would increase teachers' knowledge surrounding academic content, students' socialization, and behavioral issues (Christie, 2009), and has the potential to increase student engagement for students who live in poverty.

Results for RQ3. RQ 3 asked, How do teachers measure success in developing student engagement strategies among low-income students? This question addressed how teachers measure the level of student engagement and how they track or monitor the engagement in the classroom. For RQ3, the overall themes are described in Figure 14.

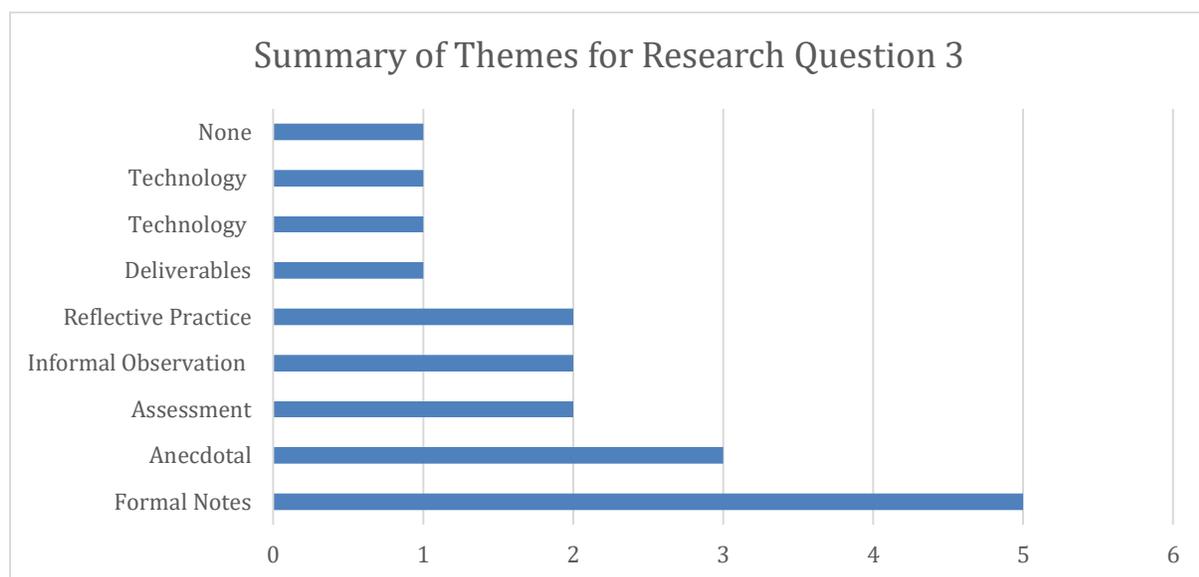


Figure 14. Summary of the themes derived from the analysis of RQ3. The themes are presented in descending order.

Themes related to RQ3 included the following:

- Teachers use a variety of tools to measure student engagement in the classroom.
- Teachers use a variety of tools to track and/or monitor student engagement in the classroom.

Discussion of RQ3. The purpose of this research question was to determine how teachers measure student engagement and track or monitor student engagement to promote

positive educational outcomes further. The findings related to this research question highlighted that although there is limited research in measuring and tracking student engagement, participants are utilizing different strategies and tools that align with the literature. A mixed methods study by Devine et al. (2013) highlighted that exemplary teachers are reflective practitioners and are effective at planning and managing learning. The participants in this study did mention that being reflective is a tool that they utilize to track student engagement. Furthermore, Taylor's (2002) research concluded that effective teachers provide opportunities for challenging discussions based on content. The participants in this study did discuss that student responses and student participation are methodologies they employ to measure student engagement.

Additionally, the Kentucky Department of Education (2017) noted that effective teaching involves the teacher being able to revise instructional strategies by analyzing assessments and providing timely feedback to students; participants in this study are using test scores and informal assessments to measure student engagement. Lastly, projects are another tool utilized by the participants in this study to measure student engagement, and the literature suggests that project-based learning (PBL) or the inquiry approach is a pedagogical practice that offers a compelling way to cultivate student interest (Balfanz, Bridgeland, Bruce, & Fox, 2012; Bell, 2010, Blumenfeld et al., 1991; Chen & Yang, 2019; English & Kitsantas, 2013; Fifolt & Morgan, 2019; Gultekin, 2005; Panasan & Nuangchalem, 2010). More importantly, students have an opportunity to “show off something they have constructed, focusing their presentation on what they were trying to accomplish, and why they did to accomplish that” (Kolodner et al., 2003, p. 524) during the last phase of PBL. The final projects are an additional tool that teachers are using to measure the level of student engagement in the classroom.

Additional research indicated that behavioral engagement is easier to measure than engagement since it is straightforward and observable, and surveys are the most common tool used to measure student engagement either by the students themselves or the teachers who are observing student engagement (Nguyen, Cannata, & Miller, 2016). The participants in this study did not mention that they are using surveys as a tool to measure student engagement, warranting additional professional development to support the teacher’s ability to track and measure student engagement in the classroom.

Results for RQ4. For RQ4, the overall themes are described in Figure 15. RQ 4 asked, What recommendations would teachers provide to incoming teachers to promote a high level of engagement among low-income students? Participants were asked about successful strategies teachers are employing and specific advice experienced teachers would give to novice teachers. Themes related RQ4 included the following:

- Experienced teachers are employing successful strategies to engage students that align with the literature.
- Experienced teachers have specific advice to share with novice teachers

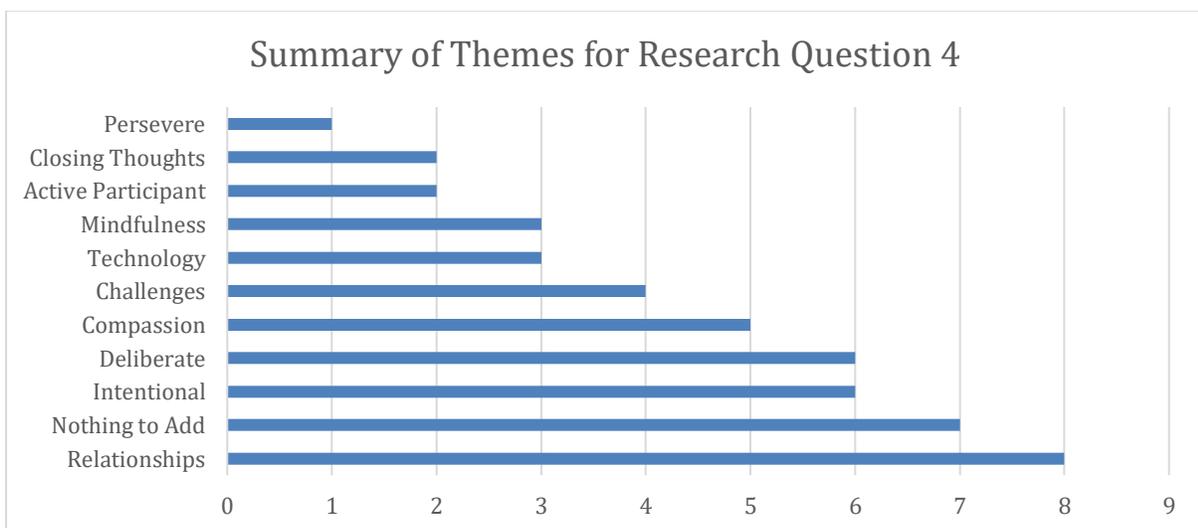


Figure 15. Summary of the themes derived from the analysis of RQ4. The themes are presented in descending order.

Discussion of RQ4. The findings related to RQ4 indicated that the participants have an understanding of successful strategies to engage students; research confirms that relationships (compassion) and technology are successful strategies that increase student engagement in the classroom.

Affective engagement considers peer relationships and the importance of having close relationships with teachers (Birch & Ladd, 1997; Ruzek et al., 2016; Yang et al., 2018). Moreover, students' positive outcomes in school are directly related to relationships. To further substantiate the importance of relatedness in school, when students feel connected to school, there are increased benefits, such as a decrease in anti-social or risky behaviors in school (Vidourek et al., 2012). Further research suggests that when students have positive relationships with peers and their teachers, motivation also increases (Gehlbach et al., 2016; Lin-Siegler et al., 2016; Pintrich, 2003; Schraw et al., 2001), highlighting the fact that a successful strategy in student engagement is building relationships: something that compassionate teachers do quite well.

Another finding from this study indicated that although teachers are utilizing technology to engage students, however, the current literature emphasizes the importance of students developing 21st century skills, such as life and career skills, and learning and innovation skills, which includes critical thinking, communication, collaboration, and creating, as well as information, media, and technological skills (Battelle for Kids, 2019). It is also essential to help students learn how to solve problems in technology environments, incorporate multimedia communication skills, and simultaneously have authentic engagement strategies (Dietrich & Balli, 2014; Tarbutton, 2018; U.S. Department of Education & Office of Educational Technology, 2017; U.S. Department of Education et al., 2018; Warschauer & Matchniak, 2010).

Furthermore, Wade et al. (2013) stated that “appropriate technology can be hugely helpful in providing students with tools to become productive learners and assist in creating a learning environment that permits active engagement in content that would not otherwise be readily available” (p. 164). Although virtual field trips and utilizing technology in high-poverty schools are effective, the current literature confirms that educators need to incorporate many other technological tools to prepare students to compete successfully in the global economy.

To conclude the discussion for RQ4, the participants shared advice for novice teachers teaching in Title I schools. It was highly recommended that new teachers build relationships with their students. The analysis presented in Jensen’s (2013b) *How Poverty Affects Classroom Engagement* emphasizes the importance of teachers developing positive relationships with students and, according to Lee and Burkam (2003), students are not as inclined to drop out of school when they have a positive relationship with teachers and other members of the school community. Building relationships is imperative for students who live in poverty.

Implications of the Study

This study aimed to identify the best practices experienced teachers employ to successfully engage students who live in poverty in order to improve academic achievement and generate positive outcomes for all students. Additionally, the findings from this study are aimed at supporting principals, teachers, students, and society by providing a training model for implementing best practices for student engagement for students who live in poverty.

Furthermore, principals can benefit from the findings of this study. They will be able to provide professional development by implementing the PSEA₂ training model to teachers teaching in high-poverty schools, which includes defining student engagement, learning about technology, and preparing students with 21st century skills. In order to improve student

achievement, it is essential to provide teachers with a deeper understanding of students who live in poverty and engagement strategies that incorporate the behavior, affective, and cognitive dimensions of student engagement. Moreover, a substantial body of research indicates that teacher professional development can enhance the quality of education (Christie, 2009; Desimone, 2011; Edwards et al., 2019; Makovec, 2018; Wassermann, 2009) and when principals provide effective professional development, teachers will change their behaviors, shift their principles, and utilize new teaching techniques to benefit student outcomes (Kalinowski et al., 2019; Kirkpatrick & Kirkpatrick, 2007; Wassermann, 2009).

This study will also benefit teachers, ultimately helping them improve their educational practices that support student engagement at Title I schools. It is evident that teachers are not receiving specific training on student engagement; therefore, it is essential to improve pedagogical practice. Additionally, research indicates that effective teaching practices acknowledge all learners in the classroom community, and teaching practices need to integrate pedagogies that address the academic, socioeconomic, and cultural diversity that mirrors the diversity in our country and global society (Santamaría, 2009). Improving instructional practices to engage all learners is imperative; dropout rates will decrease when students are engaged in school.

Students will directly benefit from this study; they will be the recipients of high-quality education that aligns with instructional practices that support students engaging in school, further promoting positive feelings toward school. Haberman (2018) stated, “Teachers must know content (the *what* of teaching) and must be experts in pedagogy (the *how*, or the art of teaching), but most importantly, teachers must know who they are teaching” (p. 93). This study will prepare teachers with a deeper understanding of instructional practice, ultimately benefitting students.

Lastly, society as a whole will benefit from this study; fewer students will drop out of school. When students drop out of school, billions of dollars are spent on welfare and unemployment programs (Aldridge et al., 2017; Christenson, Sinclair, Lehr, & Hurley, 2000). There is a positive correlation between student active engagement in school and academic achievement; Jensen (2013a) confirmed that student engagement should be the core strategy to benefit students of low socioeconomic status, directly affecting society as a whole. Therefore, high quality education can prevent school dropout, close the achievement gap, and provide all students with an engaging curriculum that supports 21st century skills.

Application

As a result of this study, a training model was developed to further benefit principals, teachers, students, and society as a whole (see Figure 16).

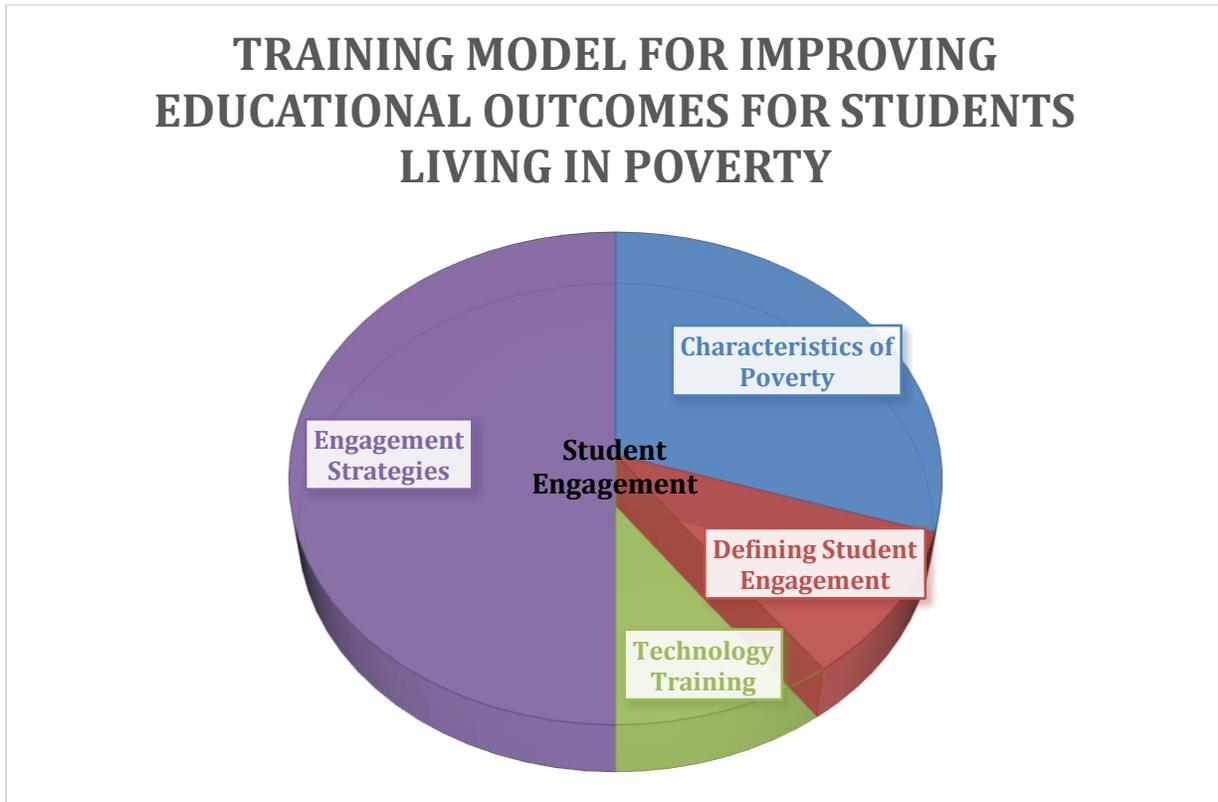


Figure 16. PSEA₂ (poverty, student engagement, and academic achievement). A training model developed for best practices in engaging students in poverty.

As a result of this study, a training model was developed based on best practices to improve the educational practices of teachers who work in high poverty schools. The current literature emphasized that when students are engaged in school, educational outcomes improve. Therefore, it is the researcher's goal to provide equal educational opportunities to all students, and by providing a deeper understanding of student engagement to teachers in Title I schools, educational outcomes can improve, high school graduation rates can increase, and all students can have better opportunities in life.

To begin the training for teachers in high-poverty schools, it is necessary to discuss the definition of student engagement. Therefore, the first 10% of the training would be dedicated to reviewing the theoretical framework of student engagement and covering pedagogical practices that support behavioral, affective, and cognitive engagement, including: delivery of instruction, building relationships within the school community, self-regulatory strategies, and the importance of relatedness to school. Furthermore, teachers and the methodology they employ directly influence academic achievement, and when teachers consider all three types of engagement—behavioral, affective, and cognitive engagement—learning outcomes improve (Lekwa et al., 2019). It is imperative that teachers understand how to apply the three dimensions of engagement in the classroom.

The next part of the training model would also encompass 10% of the participants' time and address the importance of technology. The United States Department of Education, in partnership with the Office of Educational Technology, co-authored the *National Education Technology Plan Update (NETP)*, which “describes specific actions the United States should take to ensure learners of all ages have opportunities for personal growth and prosperity and remain competitive in a global economy” (U.S. Department of Education & Office of

Educational Technology, 2017, p. 8). More specifically, the report states, “Technology can empower educators to become co-learners with their students by building new experiences for deeper exploration of content” (p. 28). This part of the training would discuss strategies suggested by the Office of Educational Technology, including the importance of teachers collaborating with other educators outside of their own school community by utilizing videoconferencing and online professional learning communities. Additionally, teachers could support students’ acquisition of 21st century skills by promoting highly engaging technological experiences on the computer such as text-based video games, using multimedia to present projects, and having students engage in simulations of real-world events.

The third part of the training would require a deeper understanding of teaching students who live in poverty. Hernandez (2011) identified that students living in poverty typically attend lower-performing schools and do not develop proficient academic skills. This finding further illustrates the importance of this training model; the goal is to improve teachers’ educational practices. Therefore, 30% of the training model is allocated to learning about the specific characteristics of students who live in poverty. Jensen’s (2009) *Teaching with Poverty in Mind: What Being Poor Does to Kids’ Brains and What Schools Can Do About It* illustrates five themes that can contribute to better educational outcomes for students living in poverty: “standards-based curriculum and instruction, hope building, arts, athletics, and advanced placement, retooling the operating system, and engaging instruction” (p. 207). This part of the training would further explore successful research-based strategies that will promote better outcomes for students living in poverty.

To conclude the training, teachers need to specifically learn engagement strategies that will support students’ abilities in school with the intent to increase graduation rates, improving

living conditions for students who are poor. Kagan, Kagan, and Kagan (2019) stated, “With a little effort, we can dramatically increase academic achievement, reduce the achievement gap, improve social and ethnic relations, foster social skills and character, reduce the incidence and severity of discipline problems. Structures are an educator’s dream” (p. x).

Kagan structures are an interactive teaching approach that incorporates learning strategies that are intended to make learning more engaging and are based on the cooperative learning approach (Kagan et al., 2019). It is imperative that, at the conclusion of the training, teachers understand what student engagement is, can utilize technology that supports 21st century skills, understand the characteristics and definition of poverty, and more importantly, have a comprehensive set of strategies that they can employ in the classroom that fully engage students, promoting positive educational outcomes for students who are living in poverty.

Study Conclusion

The researcher began this study with the intent to contribute to the existing literature surrounding student engagement for students who live in poverty. To achieve this task, the researcher had to bracket her own personal biases on effective teaching strategies for students attending Title I school. Furthermore, through the collection of data from 13 interviews, the researcher was able to code and analyze 11 open-ended questions that informed the four research questions. Accordingly, the research questions were designed to identify successful strategies teachers use to support student engagement, the challenges teachers encounter in increasing student engagement, how teachers measure and track student engagement, and the recommendations teachers would offer to incoming teachers. As a result of this study, a training model was developed that integrates the findings from the literature and includes the following key findings. Teachers would benefit from professional development that includes: a deeper

understanding of the theoretical framework for student engagement, a more comprehensive understanding of the implications of poverty, implementing technology in schools that supports 21st century skills, and lastly, a comprehensive set of highly effective engagement strategies that will support positive educational outcomes for students living in poverty.

Recommendations for Future Research

This study was designed to explore the instructional practices of exemplary teachers to understand student engagement with students who live in poverty. This study also sought to understand the correlation between socioeconomic status and academic achievement. In the process of gathering data, it was evident that future studies surrounding poverty are needed. For example, future researchers can contribute to the existing body of literature by conducting studies that explore:

1. Communities of practice for educators who teach in high poverty schools. For example, a future study would investigate how communities of practice can impact the educational practices of educators in Title I schools.
2. Research questions that focus on understanding the nature of poverty. For example, a future study would seek to understand the complexity of poverty and how poverty affects the developing brain.

Final Thoughts

Prior to writing the dissertation, the researcher did not intend to study student engagement for students who live in poverty; in contrast, the researcher intended to understand the consequences of technology use for students at the elementary level. However, following recommendations from the dissertation committee, the researcher was guided to investigate best practices for students who live in poverty. Throughout the process, as each chapter developed,

the researcher became more passionate about the topic and not only discovered the importance of the topic, but also developed a training model that can affect the students in the Unified School District and throughout the United States. Students who live in poverty deserve “classrooms that are relevant, engaging, and full of affirming relationships” (Jensen, 2013a, p. 3) to keep them in school and enable them to achieve academic success.

Additionally, over the last 36 years teaching in Title I schools, the researcher has observed that more children are struggling not only academically, but also socially and emotionally as well. It is evident that school culture is changing in public schools, and educators must shift their mindset and utilize research-based practices that would ultimately benefit students who are living in poverty. Furthermore, the researcher firmly believes that if educators do not adjust their pedagogical practice, the dropout rate will increase, dramatically affecting our society as a whole.

Equally important, during the data collection process, the researcher noted that only one participant mentioned the correlation between student engagement and academic achievement. P8 stated, “Better engaged, better achievement.” This statement further illustrated the need for the PSEA₂ training model to support teachers’ understanding of the relationship among poverty, student engagement, and academic achievement. The researcher hopes to influence students nationwide, changing the educational systems for poor students and in turn positively affecting societal structures.

REFERENCES

- Ablard, K. E., & Lipschultz, R. E. (1998). Self-regulated learning in high-achieving students: Relations to advanced reasoning, achievement goals, and gender. *Journal of Educational Psychology, 90*(1), 94-101. <https://doi.org/10.1037//0022-0663.90.1.94>
- Abramovich, A., & Miedijensky, S. (2019). From a guided teacher into leader: A three-stage professional development (TSPD) model for empowering teachers. *Higher Education Studies, 9*(2), 57-71. <https://doi.org/10.5539/hes.v9n2p57>
- Acharya, A. S., Prakash, A., Saxena, P., & Nigam, A. (2013). Sampling: why and how of it? *Indian Journal of Medical Specialties, 4*(2), 330-333. <https://doi.org/10.7713/ijms.2013.0032>
- Achinstein, B., & Athanases, S. Z. (2005). Focusing new teachers on diversity and equity: Toward a knowledge base for mentors. *Teaching and Teacher Education, 21*(7), 843-862. <https://doi.org/10.1016/j.tate.2005.05.017>
- Adamson, R. M., McKenna, J. W., & Mitchell, B. (2019). Supporting all students: Creating a tiered continuum of behavior support at the classroom level to enhance schoolwide multi-tiered systems of support. *Preventing School Failure: Alternative Education for Children and Youth, 63*(1), 62-67. <https://doi.org/10.1080/1045988x.2018.1501654>
- Ahern, K. (1999). Ten tips for reflexive bracketing. *Qualitative Health Research, 9*(3), 407-411. <https://doi.org/10.1177/104973239900900309>
- Ainley, M., & Ainley, J. (2011). Student engagement with science in early adolescence: The contribution of enjoyment to students' continuing interest in learning about science. *Contemporary Educational Psychology, 36*(1), 4-12. <https://doi.org/10.1016/j.cedpsych.2010.08.001>

- Aldahmash, A., Alshamrani, S., Alshaya, F., & Alsarrani, N. (2019). Research trends in in-service science teacher professional development from 2012 to 2016. *International Journal of Instruction*, 12(2), 163-178. <https://doi.org/10.29333/iji.2019.12211a>
- Aldridge, J. M., McChesney, K., & Afari, E. (2017). Relationships between school climate, bullying and delinquent behaviours. *Learning Environments Research*, 21(2), 153-172. <https://doi.org/10.1007/s10984-017-9249-6>
- Alliance for Excellent Education. (2012). *Culture shift: Teaching in a learner-centered environment powered by digital learning*. Retrieved from <https://all4ed.org/reports-factsheets/culture-shift-teaching-in-a-learner-centered-environment-powered-by-digital-learning/>
- Allington, R. L. (2002). What I've learned about effective reading instruction. *Phi Delta Kappan*, 83(10), 740-747. <https://doi.org/10.1177/003172170208301007>
- Appleton, J. J., Christenson, S. L., & Furlong, M. J. (2008). Student engagement with school: Critical conceptual and methodological issues of the construct. *Psychology in the Schools*, 45(5), 369-386. <https://doi.org/10.1002/pits.20303>
- Archambault, I., & Dupéré, V. (2016). Joint trajectories of behavioral, affective, and cognitive engagement in elementary school. *The Journal of Educational Research*, 110(2), 188-198. <https://doi.org/10.1080/00220671.2015.1060931>
- Archambault, I., Vandenbossche-Makombo, J., & Fraser, S. L. (2017). Students' oppositional behaviors and engagement in school: The differential role of the student-teacher relationship. *Journal of Child and Family Studies*, 26(6), 1702-1712. <https://doi.org/10.1007/s10826-017-0691-y>

- Ashwin, P., & McVitty, D. (2015). The meanings of student engagement: Implications for policies and practices. *The European Higher Education Area*, 343-359. doi:10.1007/978-3-319-20877-0_23
- Assaf, L. C., Garza, R., & Battle, J. (2010). Multicultural teacher education: Examining the perceptions, practices, and coherence in one teacher preparation program. *Teacher Education Quarterly*, 37(2), 115-135. Retrieved from ERIC database. (EJ896073)
- Babbage, K. (2014). *Extreme Teaching*. Lanham, MD: Rowman & Littlefield.
- Balfanz, R., Bridgeland, J. M., Bruce, M., & Fox, J. H. (2012). *Building a grad nation: Progress and challenge in ending the high school dropout epidemic*. Retrieved from <https://files.eric.ed.gov/fulltext/ED530320.pdf>
- Balfanz, R., & Byrnes, V. (2006). Closing the mathematics achievement gap in high-poverty middle schools: Enablers and constraints. *Journal of Education for Students Placed at Risk (JESPAR)*, 11(2), 143-159. https://doi.org/10.1207/s15327671espr1102_2
- Balfanz, R., Herzon, L., & Mac Iver, D. J. (2007). Preventing student disengagement and keeping students on the graduation path in urban middle-grades schools: Early identification and effective interventions. *Educational Psychologist*, 42(4), 223-235. <https://doi.org/10.1080/00461520701621079>
- Battelle for Kids. (2019). *Framework for 21st century learning*. Retrieved from <http://www.battelleforkids.org/networks/p21/frameworks-resources>
- Bazeley, P. (2013). *Qualitative data analysis: Practical strategies*. Thousand Oaks, CA: SAGE.
- Begeny, J. C., & Martens, B. K. (2006). Assessing pre-service teachers' training in empirically-validated behavioral instruction practices. *School Psychology Quarterly*, 21(3), 262-285. <https://doi.org/10.1521/scpq.2006.21.3.262>

- Beijaard, D., Verloop, N., & Vermunt, J. D. (2000). Teachers' perceptions of professional identity: an exploratory study from a personal knowledge perspective. *Teaching and Teacher Education, 16*(7), 749-764. [https://doi.org/10.1016/s0742-051x\(00\)00023-8](https://doi.org/10.1016/s0742-051x(00)00023-8)
- Bell, S. (2010). Project-based learning for the 21st century: Skills for the future. *The Clearing House, 83*, 39-43. <https://doi.org/10.1080/00098650903505415>
- Benekos, P. J. (2016). How to be a good teacher: Passion, person, and pedagogy. *Journal of Criminal Justice Education, 27*(2), 225-237. <https://doi.org/10.1080/10511253.2015.1128703>
- Ben-Eliyahu, A., & Kaplan, A. (2015). Growth curve modeling analysis of social and academic coping during elementary school. *Journal of Applied Developmental Psychology, 41*, 99-109. <https://doi.org/10.1016/j.appdev.2015.09.001>
- Birch, S. H., & Ladd, G. W. (1997). The teacher-child relationship and children's early school adjustment. *Journal of School Psychology, 35*(1), 61-79. [https://doi.org/10.1016/s0022-4405\(96\)00029-5](https://doi.org/10.1016/s0022-4405(96)00029-5)
- Blumenfeld, P., Soloway, E., Marx, R., Krajcik, J., Guzdial, M., & Palincsar, A. (1991). Motivating project-based learning: Sustaining the doing, supporting the learning. *Educational Psychologist, 26*(3), 369-398. https://doi.org/10.1207/s15326985ep2603&4_8
- Blumer, H. (1969). *Symbolic interactionism: Perspective and method*. Englewood Cliffs, NJ: Prentice Hall.
- Bolkan, S., Goodboy, A. K., & Kelsey, D. M. (2015). Instructor clarity and student motivation: Academic performance as a product of students' ability and motivation to process

- instructional material. *Communication Education*, 65(2), 129-148.
<https://doi.org/10.1080/03634523.2015.1079329>
- Bradley, R. H., & Corwyn, R. F. (2002). Socioeconomic status and child development. *Annual Review of Psychology*, 53(1), 371-399.
<https://doi.org/10.1146/annurev.psych.53.100901.135233>
- Brinkmann, S., & Kvale, S. (2015). *InterViews: Learning the craft of qualitative research interviewing* (3rd ed.). Thousand Oaks, CA: SAGE Publications.
- Cai, E. Y., & Liem, G. A. (2017). “Why do I study and what do I want to achieve by studying?” Understanding the reasons and the aims of student engagement. *School Psychology International*, 38(2), 131-148. <https://doi.org/10.1177/0143034316686399>
- California Department of Education. (2013). *California Joins P21 Network - Year 2013 (CA Dept of Education)*. Retrieved from <https://www.cde.ca.gov/nr/ne/yr13/yer13rel33.asp>
- California Department of Education. (2019). *State superintendent Tony Thurmond announces 2018-2019 enrollment data for California schools* [Press release]. Retrieved from <https://www.cde.ca.gov/nr/ne/yr19/yr19rel27.asp>
- California’s future: K-12 education. (n.d.). Retrieved from <https://www.ppic.org/publication/californias-future-k-12-education/>
- Cantalini-Williams, M. T., Curtis, D., Eden-DeGasperis, K., Esposito, L., Guibert, J., Papp, H., & Roque, C. (2016). Exploring the benefits of a collaborative inquiry team in education (CITE) initiative to develop a research community and enhance student engagement. *Brock Education Journal*, 25(1), 55-72. <https://doi.org/10.26522/brocked.v25i1.439>
- Carter, C. P., Reschly, A. L., Lovelace, M. D., Appleton, J. J., & Thompson, D. (2012). Measuring student engagement among elementary students: Pilot of the student

- engagement Instrument—elementary version. *School Psychology Quarterly*, 27(2), 61-73. <https://doi.org/10.1037/a0029229>
- Castillo-Montoya, M. (2016). Preparing for the interview research: The interview protocol refinement framework. *The Qualitative Report*, 21(3), 811-831. Retrieved from <https://nsuworks.nova.edu/tqr>
- Cevik, M., & Senturk, C. (2019). Multidimensional 21st century skills scale: Validity and reliability study. *Cypriot Journal of Educational Sciences*, 14(1), 11-28. <https://doi.org/10.18844/cjes.v14i1.3506>
- Chan, Z. C., Fung, Y., & Chien, W. (2013). Bracketing in phenomenology: Only undertaken in the data collection and analysis process. *The Qualitative Report*, 18(30), 1-9. Retrieved from <https://nsuworks.nova.edu/tqr/vol18/iss30/1/>
- Chang, H. N., & Romero, M. (2008). *Present, engaged, and accounted for. The critical importance of addressing chronic absence in the early grades*. Retrieved from <https://files.eric.ed.gov/fulltext/ED522727.pdf>
- Chen, C., & Yang, Y. (2019). Revisiting the effects of project-based learning on students' academic achievement: A meta-analysis investigating moderators. *Educational Research Review*, 26, 71-81. <https://doi.org/10.1016/j.edurev.2018.11.001>
- Christie, K. (2009). Professional development worth paying for. *Phi Delta Kappan*, 90(7), 461-463. <https://doi.org/10.1177/0031721709090000703>
- Christenson, S.L., Sinclair, M. F., Lehr, C. A., & Hurley, C. M. (2000). Promoting successful school completion. In D. Minke & G. Bear (Eds.), *Preventing school problems-promoting school success: Strategies and programs that work* (pp. 377-420). Bethesda, MD: National Association of School Psychologists.

- Christenson, S. L., & Thurlow, M. L. (2004). School dropouts: Prevention considerations, interventions, and challenges. *Current Directions in Psychological Science, 13*(1), 36-39.
<https://doi.org/10.1111/j.0963-7214.2004.01301010.x>
- Clapper, T. C. (2015). Cooperative-based learning and the zone of proximal development. *Simulation & Gaming, 46*(2), 148-158. doi:10.1177/1046878115569044
- Clotfelter, C., Ladd, H. F., Vigdor, J., & Wheeler, J. (2007). High poverty schools and the distribution of teachers and principals. *North Carolina Law Review, 85*(5), 1345-1380.
<https://doi.org/10.1037/e722752011-001>
- Çolak, E. (2015). The effect of cooperative learning on the learning approaches of students with different learning styles. *Eurasian Journal of Educational Research, 15*(59), 17-34.
<https://doi.org/10.14689/ejer.2015.59.2>
- Condliffe, B., Quint, J., Visher, M. G., Bangser, M. R., Drohojowska, R., Saco, L., & Nelson, E. (2017). *Project-based learning: A literature review*. Retrieved from
<https://files.eric.ed.gov/fulltext/ED578933.pdf>
- Connell, R. W. (1994). Poverty and education. *Harvard Educational Review, 64*(2), 125-150.
<https://doi.org/10.17763/haer.64.2.m14947g30k1x5781>
- Connell, J.P., & Wellborn, J. G. (1991). Competence, autonomy and relatedness: A motivational analysis of self-system processes. In M. Gunnar & L. A. Sroufe (Eds.), *Minnesota symposium on child psychology: Self processes in development* (Vol. 23, pp. 43-77). Chicago, IL: University of Chicago Press.
- Creswell, J. W. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Thousand Oaks, CA: SAGE.

- Cruickshank, D. R., & Haefele, D. (2001). Good teachers, plural. *Educational Leadership*, 58(5), 26-30. Retrieved from www.ascd.org/publicatons/educational-leadership/feb01/vol58/num05/Good-Teachers,-Plural.aspx
- Cuthrell, K., Stapleton, J., & Ledford, C. (2009). Examining the culture of poverty: Promising practices. *Preventing School Failure: Alternative Education for Children and Youth*, 54(2), 104-110. <https://doi.org/10.1080/10459880903217689>
- D'Angiulli, A., Siegel, L. S., & Maggi, S. (2004). Literacy instruction, SES, and word-reading achievement in English-language learners and children with English as a first language: A longitudinal study. *Learning Disabilities Research and Practice*, 19(4), 202-213. <https://doi.org/10.1111/j.1540-5826.2004.00106.x>
- Darling-Hammond, L. (2004). Inequality and the right to learn: Access to qualified teachers in California's public schools. *Teachers College Record*, 106(10), 1936-1966. <https://doi.org/10.1111/j.1467-9620.2004.00422.x>
- Denzin, N. K. (1989). *Interpretive interactionism*. Thousand Oaks, CA: SAGE Publications.
- Desimone, L. M. (2011). A primer on effective professional development. *Phi Delta Kappan*, 92(6), 68-71. <https://doi.org/10.1177/003172171109200616>
- Devi, A. P., Musthafa, B., & Gustine, G. G. (2016). Using cooperative learning In teaching critical thinking In reading. *English Review: Journal of English Education*, 4(1), 1-14. <https://doi.org/10.25134/erjee.v4i1.310>
- Devine, D., Fahie, D., & McGillicuddy, D. (2013). What is 'good' teaching? Teacher beliefs and practices about their teaching. *Irish Educational Studies*, 32(1), 83-108. <https://doi.org/10.1080/03323315.2013.773228>

- Dietrich, T., & Balli, S. J. (2014). Digital natives: Fifth-grade students' authentic and ritualistic engagement with technology. *International Journal of Instruction*, 7(2), 21-34. Retrieved from <https://eric.ed.gov/?id=EJ1085266>
- Donnelly, J. (2003). *Career development for teachers*. London, England: Routledge.
- Downer, J. T., Rimm-Kaufman, S. E., & Pianta, R. C. (2007). How do classroom conditions and children's risk for school problems contribute to children's behavioral engagement in learning? *School Psychology Review*, 36(3), 413-432. Retrieved from <https://eric.ed.gov/?id=EJ788351>
- Duke, N. K., Cervetti, G., & Wise, C. N. (2016). The teacher and the classroom. *Journal of Education*, 196(3). <https://doi.org/10.1177/002205741619600306>
- Duke, N. K., Cervetti, G. N., & Wise, C. N. (2017). Learning from exemplary teachers of literacy. *The Reading Teacher*, 71(4), 395-400. <https://doi.org/10.1002/trtr.1654>
- Dukes, S. (1984). Phenomenological methodology in the human sciences. *Journal of Religion & Health*, 23(3), 197-203. <https://doi.org/10.1007/bf00990785>
- Duncan, G. J., & Magnuson, K. (2011). The nature and impact of early achievement skills, attention skills, and behavior problems. In G. J. Duncan & R. J. Murnane (Eds.), *Whither opportunity?: Rising inequality, schools, and children's life chances* (pp. 47-70). New York, NY: Russell Sage Foundation.
- Dunst, C. J., & Raab, M. (2010). Practitioners' self-evaluations of contrasting types of professional development. *Journal of Early Intervention*, 32(4), 239-254. <https://doi.org/10.1177/1053815110384702>

- Duta, N., Tomoaica, E., & Panisoara, G. (2015). Desirable characteristics defining to describe an effective teacher. *Procedia - Social and Behavioral Sciences*, *197*, 1223-1229.
<https://doi.org/10.1016/j.sbspro.2015.07.383>
- Edwards, L. C., Bryant, A. S., Morgan, K., Cooper, S., Jones, A. M., & Keegan, R. J. (2019). A professional development program to enhance primary school teachers' knowledge and operationalization of physical literacy. *Journal of Teaching in Physical Education*, *38*(2), 126-135. <https://doi.org/10.1123/jtpe.2018-0275>
- Emmer, E. T., & Gerwels, M. C. (2002). Cooperative learning in elementary classrooms: Teaching practices and lesson characteristics. *The Elementary School Journal*, *103*(1), 75-91. <https://doi.org/10.1086/499716>
- English, M. C., & Kitsantas, A. (2013). Supporting student self-regulated learning in problem- and project-based learning. *Interdisciplinary Journal of Problem-Based Learning*, *7*(2), 128-150. <https://doi.org/10.7771/1541-5015.1339>
- Ertmer, P. A., & Simons, K. D. (2006). Jumping the PBL implementation hurdle: Supporting the efforts of K–12 teachers. *Interdisciplinary Journal of Problem-Based Learning*, *1*(1), 40-54. doi:10.7771/1541-5015.1005
- Evans, G. W., Kim, P., Ting, A. H., Tesher, H. B., & Shannis, D. (2007). Cumulative risk, maternal responsiveness, and allostatic load among young adolescents. *Developmental Psychology*, *43*(2), 341-351. <https://doi.org/10.1037/0012-1649.43.2.341>
- Fernald, A., Marchman, V. A., & Weisleder, A. (2012). SES differences in language processing skill and vocabulary are evident at 18 months. *Developmental Science*, *16*(2), 234-248.
<https://doi.org/10.1111/desc.12019>

- Fifolt, M., & Morgan, A. F. (2019). Engaging K-8 students through inquiry-based learning and school farms. *Journal of Education for Students Placed at Risk (JESPAR)*, 24(1), 92-108. <https://doi.org/10.1080/10824669.2018.1545583>
- Finn, J. D. (1989). Withdrawing from school. *Review of Educational Research*, 59(2), 117-142. <https://doi.org/10.3102/00346543059002117>
- Finn, J. D., & Rock, D. A. (1997). Academic success among students at risk for school failure. *Journal of Applied Psychology*, 82(2), 221-234. <https://doi.org/10.1037//0021-9010.82.2.221>
- Finn, J. D., Pannozzo, G. M., & Voelkl, K. E. (1995). Disruptive and inattentive-withdrawn behavior and achievement among fourth graders. *The Elementary School Journal*, 95(5), 421-434. <https://doi.org/10.1086/461853>
- Fitzpatrick, C., & Pagani, L. S. (2013). Task-oriented behavior pays off in later childhood. *Journal of Developmental and Behavioral Pediatrics*, 34, 94-101. <https://doi.org/10.1097/DBP.0b013e31827a3779>
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59-109. <https://doi.org/10.3102/00346543074001059>
- Furrer, C., & Skinner, E. (2003). Sense of relatedness as a factor in children's academic engagement and performance. *Journal of Educational Psychology*, 95(1), 148-162. <https://doi.org/10.1037//0022-0663.95.1.148>
- Futures without Violence. (2015). *Safe, healthy, and ready to learn (Research report)*. Retrieved from http://d3vc4vygg8dc62.cloudfront.net/wp-content/uploads/Safe-Healthy-and-Ready-to-Learn_Full-Report.pdf

- Gehlbach, H., Brinkworth, M. E., King, A. M., Hsu, L. M., McIntyre, J., & Rogers, T. (2016). Creating birds of similar feathers: Leveraging similarity to improve teacher–student relationships and academic achievement. *Journal of Educational Psychology, 108*(3), 342-352. <https://doi.org/10.1037/edu0000042>
- Gentry, M., Steenbergen-Hu, S., & Choi, B. (2011). Student-identified exemplary teachers: Insights from talented teachers. *Gifted Child Quarterly, 55*(2), 111-125. <https://doi.org/10.1177/0016986210397830>
- Gillies, R. M. (2014). Developments in cooperative learning: Review of research [Desarrollos en aprendizaje cooperativo: revisión de la investigación]. *Anales de Psicología, 30*(3), 792-801. <https://doi.org/10.6018/analesps.30.3.201191>
- Gillies, R. M., & Boyle, M. (2010). Teachers’ reflections on cooperative learning: Issues of implementation. *Teaching and Teacher Education, 26*(4), 933-940. <https://doi.org/10.1016/j.tate.2009.10.034>
- Great Schools Partnership. (2013, August 29). English-language learner definition. In *Ed Glossary*. Retrieved from <https://www.edglossary.org/english-language-learner/>
- Groccia, J. E. (2018). What is student engagement? *New Directions for Teaching and Learning, 2018*(154), 11-20. <https://doi.org/10.1002/tl.20287>
- Grossoehme, D. H. (2014). Overview of qualitative research. *Journal of Health Care Chaplaincy, 20*, 109-122. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/24926897>
- Gültekin, M. (2005). The effect of project based learning on learning outcomes in the 5th grade social studies course in primary education. *Educational Sciences: Theory and Practice, 5*(2), 548-556. Retrieved from <https://www.academia.edu/1456133/>

- Haberman, M. (2018). What star teachers don't do. In M. Haberman, M. D. Gillette, & D. A. Hill (Eds.), *Star teachers of children in poverty* (2nd ed., pp. 17-28). London, England: Routledge.
- Hamdan, R. K. (2017). The effect of think-pair-share strategy on the achievement of third grade student in sciences in the educational district of Irbid. *Journal of Education and Practice*, 8(9), 88-95. Retrieved from <https://eric.ed.gov/?id=EJ1139082>
- Hammond, Z. (2014). *Culturally responsive teaching and the brain: Promoting authentic engagement and rigor among culturally and linguistically diverse students*. Thousand Oaks, CA: Corwin Press.
- Hamre, B. K., & Pianta, R. C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development*, 72(2), 625-638. <https://doi.org/10.1111/1467-8624.00301>
- Harris, J., Mishra, P., & Koehler, M. (2009). Teachers' technological pedagogical content knowledge and learning activity types. *Journal of Research on Technology in Education*, 41(4), 393-416. <https://doi.org/10.1080/15391523.2009.10782536>
- Hativa, N., Barak, R., & Simhi, E. (2001). Exemplary university teachers: Knowledge and beliefs regarding effective teaching dimensions and strategies. *The Journal of Higher Education*, 72(6), 699. <https://doi.org/10.2307/2672900>
- Hernandez, D. J. (2011). *Double jeopardy: How third-grade reading skills and poverty influence high school graduation*. Retrieved from the Annie E. Casey Foundation website: <https://files.eric.ed.gov/fulltext/ED518818.pdf>

- Herrmann, K. J. (2013). The impact of cooperative learning on student engagement: Results from an intervention. *Active Learning in Higher Education, 14*(3), 175-187.
<https://doi.org/10.1177/1469787413498035>
- Hertzog, N. B. (2007). Transporting pedagogy: Implementing the project approach in two first-grade classrooms. *Journal of Advanced Academics, 18*(4), 530-564.
<https://doi.org/10.4219/jaa-2007-559>
- Hill, L., Gao, N., & Warren, P. (2019, January). *California's future: K-12 education*. Retrieved from <https://www.ppic.org/publication/californias-future-k-12-education/>
- Hirn, R. G., Hollo, A., & Scott, T. M. (2018). Exploring instructional differences and school performance in high-poverty elementary schools. *Preventing School Failure: Alternative Education for Children and Youth, 62*(1), 37-48.
<https://doi.org/10.1080/1045988x.2017.1329197>
- Hirsh, S., & Killion, J. (2009). When educators learn, students learn. *Phi Delta Kappan, 90*(7), 464-469. <https://doi.org/10.1177/003172170909000704>
- Hoang, N., Holopainen, L., & Siekkinen, M. (2019). Classroom quality profiles and associations with children's classroom engagement in Vietnamese kindergartens. *Learning Environments Research, 22*(2), 193-208. <https://doi.org/10.1007/s10984-018-9273-1>
- Hsiung, C. (2012). The effectiveness of cooperative learning. *Journal of Engineering Education, 101*(1), 119-137. <https://doi.org/10.1002/j.2168-9830.2012.tb00044.x>
- Huffman, S. (2018). The digital divide revisited: What is next? *Education, 138*(3), 239-246.
Retrieved from <https://eric.ed.gov/?id=EJ1171609>

- Hughes, J. N., Cao, Q., West, S. G., Allee Smith, P., & Cerda, C. (2017). Effect of retention in elementary grades on dropping out of school early. *Journal of School Psychology, 65*, 11-27. <https://doi.org/10.1016/j.jsp.2017.06.003>
- Irvin, M. J., Meece, J. L., Byun, S., Farmer, T. W., & Hutchins, B. C. (2011). Relationship of school context to rural youth's educational achievement and aspirations. *Journal of Youth and Adolescence, 40*(9), 1225-1242. <https://doi.org/10.1007/s10964-011-9628-8>
- Jennings, T. (2007). Addressing diversity in US teacher preparation programs: A survey of elementary and secondary programs' priorities and challenges from across the United States of America. *Teaching and Teacher Education, 23*(8), 1258-1271. <https://doi.org/10.1016/j.tate.2006.05.004>
- Jensen, E. (2009). *Teaching with poverty in mind: What being poor does to kids' brains and what schools can do about it*. Alexandria, VA: ASCD.
- Jensen, E. (2013a). *Engaging students with poverty in mind: Practical strategies for raising achievement*. Alexandria, VA: ASCD.
- Jensen, E. (2013b). How poverty affects classroom engagement. *Educational Leadership, 70*(8), 24-30. Retrieved from www.ascd.org/.../educational.../How-Poverty-Affects-Classroom-Engagement.aspx
- Johnson, D. W., & Johnson, R. T. (1999). Making cooperative learning work. *Theory Into Practice, 38*(2), 67-73. <https://doi.org/10.1080/00405849909543834>
- Johnson, D. W., & Johnson, R. T. (2003). *Joining together: Group theory and group skills* (8th ed.). Boston, MA: Allyn & Bacon.

- Johnson, D. W., & Johnson, R. T. (2009). An educational psychology success story: Social interdependence theory and cooperative learning. *Educational Researcher*, 38(5), 365-379. <https://doi.org/10.3102/0013189x09339057>
- Johnson, D. W., Johnson, R. T., & Holubec, E. (2008). *Cooperation in the classroom* (8th ed.). Edina, MN: Interaction Book Company.
- Jones, B. D., & Skaggs, G. (2016). Measuring students' motivation: Validity evidence for the MUSIC model of academic motivation inventory. *International Journal for the Scholarship of Teaching and Learning*, 10(1). <https://doi.org/10.20429/ijstol.2016.100107>
- Justice, C., Rice, J., Warry, W., Inglis, S., Miller, S., & Sammon, S. (2007). Inquiry in higher education: Reflections and directions on course design and teaching methods. *Innovative Higher Education*, 31(4), 201-214. <https://doi.org/10.1007/s10755-006-9021-9>
- Kaddoura, M. (2013). Think pair share: A teaching learning strategy to enhance students' critical thinking. *Education Research Quarterly*, 36(4), 3-24. Retrieved from <https://eric.ed.gov/?id=EJ1061947>
- Kagan, S., Kagan, L., & Kagan, M. (2019). *60 more Kagan structures*. San Clemente, CA: Kagan Publishing.
- Kalinowski, E., Gronostaj, A., & Vock, M. (2019). Effective professional development for teachers to foster students' academic language proficiency across the curriculum: A systematic review. *AERA Open*, 5(1), 233285841982869. <https://doi.org/10.1177/2332858419828691>

- Karacop, A., & Diken, E. H. (2017). The effects of jigsaw technique based on cooperative learning on prospective science teachers' science process skill. *Journal of Education and Practice*, 8(6), 86-97. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1133003.pdf>
- Kearney, W. S., Herrington, D. E., & Aguilar, D. V. (2012). Beating the odds: Exploring the 90/90/90 phenomenon. *Equity & Excellence in Education*, 45(2), 239-249.
<https://doi.org/10.1080/10665684.2012.661248>
- Keehn, S., & Martinez, M. G. (2006). A study of the impact of professional development in diversity on adjunct faculty. *Action in Teacher Education*, 28(3), 11-28.
<https://doi.org/10.1080/01626620.2006.10463416>
- Kentucky Department of Education (2017). *Characteristics of highly effective teaching and learning (CHETL)*. Retrieved from
[https://education.ky.gov/curriculum/standards/teachtools/Pages/Characteristics-of-Highly-Effective-Teaching-and-Learning-\(CHETL\).aspx](https://education.ky.gov/curriculum/standards/teachtools/Pages/Characteristics-of-Highly-Effective-Teaching-and-Learning-(CHETL).aspx)
- Kirkpatrick, D., & Kirkpatrick, J. (2007). *Evaluating training programs: The four levels* (3rd ed.). Oakland, CA: Berrett-Koehler Publishers.
- Klem, A. M., & Connell, J. P. (2004). Relationships matter: Linking teacher support to student engagement and achievement. *Journal of School Health*, 74(7), 262-273.
<https://doi.org/10.1111/j.1746-1561.2004.tb08283.x>
- Koball, H., & Jiang, Y. (2018, January). *Basic facts about low-income children*. Retrieved from
http://www.nccp.org/publications/pdf/text_1194.pdf
- Kober, N., & Rentner, D. S. (2012). *Year two of implementing the Common Core State Standards: States' progress and challenges*. Retrieved from
<https://eric.ed.gov/?id=ED528907>

- Kokotaski, D., Menzies, V., & Wiggins, A. (2016). Project-based learning: A review of the literature. *Improving Schools*, 19(3), 267-277.
<https://doi.org/10.1177/1365480216659733>
- Kolanczyk, D., & Arif, S. A. (2017). Impact of a modified jigsaw method for learning an unfamiliar, complex topic. *Innovations in Pharmacy*, 8(3).
<https://doi.org/10.24926/iip.v8i3.537>
- Kolodner, J. L., Camp, P. J., Crismond, D., Fasse, B., Gray, J., Holbrook, J., ... Ryan, M. (2003). Problem-based learning meets case-based reasoning in the middle-school science classroom: Putting Learning by Design into practice. *Journal of the Learning Sciences*, 12(4), 495-547. https://doi.org/10.1207/s15327809jls1204_2
- Krach, S. K., McCreery, M. P., & Rimel, H. (2016). Examining teachers' behavioral management charts: A comparison of class dojo and paper-pencil methods. *Contemporary School Psychology*, 21(3), 267-275. doi:10.1007/s40688-016-0111-0
- Krajcik, J., & Shin, N. (2014). Project-based learning. In R. K. Sawyer (Ed.), *The Cambridge handbook of the learning sciences* (pp. 317-333) New York, NY: Cambridge University Press.
- Krueger, R. A. (2015). Using Stories in Evaluation. In K. E. Newcomer, H. P. Hatry, & J. S. Wholey Linley & S. Joseph (Eds.), *Handbook of practical program evaluation* (4th ed., pp. 535-556). Hoboken, NJ: John Wiley & Sons.
- Kuh, G. D. (2009). The national survey of student engagement: Conceptual and empirical foundations. *New Directions for Institutional Research*, 2009(141), 5-20.
<https://doi.org/10.1002/ir.283>

- Kumar, R. (2014). *Research methodology: A step-by-step guide for beginners* (4th ed.). Thousand Oaks, CA: SAGE.
- Lange, C., Costley, J., & Han, S. L. (2016). Informal cooperative learning in small groups: The effect of scaffolding on participation. *Issues in Educational Research*, 26(2), 260-279. Retrieved from <http://www.iier.org.au/iier26/lange.pdf>
- Learning Forward. (2019). *Vision, mission, beliefs, & priorities*. Retrieved from <https://learningforward.org/who-we-are/purpose-beliefs-priorities>
- Lee, V. E., & Burkam, D. T. (2003). Dropping out of high school: The role of school organization and structure. *American Educational Research Journal*, 40(2), 353-393. doi:10.3102/00028312040002353
- Lei, H., Cui, Y., & Zhou, W. (2018). Relationships between student engagement and academic achievement: A meta-analysis. *Social Behavior and Personality: An International Journal*, 46(3), 517-528. <https://doi.org/10.2224/sbp.7054>
- Lekwa, A. J., Reddy, L. A., & Shernoff, E. S. (2019). Measuring teacher practices and student academic engagement: A convergent validity study. *School Psychology*, 34(1), 109-118. <https://doi.org/10.1037/spq0000268>
- Li, C., Wu, M., & Lin, W. (2019). The use of a “think-pair-share” brainstorming advance organizer to prepare learners to listen in the L2 classroom. *International Journal of Listening*, 33(2), 114-127. <https://doi.org/10.1080/10904018.2017.1394193>
- Lin-Siegler, X., Dweck, C. S., & Cohen, G. L. (2016). Instructional interventions that motivate classroom learning. *Journal of Educational Psychology*, 108(3), 295-299. <https://doi.org/10.1037/edu0000124>

- Lipina, S. J. (2016). Critical considerations about the use of poverty measures in the study of cognitive development. *International Journal of Psychology, 52*(3), 241-250.
<https://doi.org/10.1002/ijop.12282>
- Lopez, S. J., & Magyar-Moe, J. L. (2015). Strategies for accentuating hope. In P.A. Linley & S. Joseph (Eds.), *Positive psychology in practice* (2nd ed., pp. 483-502). Hoboken, NJ: John Wiley & Sons.
- Lovelace, M. D., Reschly, A. L., & Appleton, J. J. (2017). Beyond school records: The value of cognitive and affective engagement in predicting dropout and on-time graduation. *Professional School Counseling, 21*(1), 1096-2409. <https://doi.org/10.5330/1096-2409-21.1.70>
- Machemer, P. L., & Crawford, P. (2007). Student perceptions of active learning in a large cross-disciplinary classroom. *Active Learning in Higher Education, 8*(1), 9-30.
<https://doi.org/10.1177/1469787407074008>
- Maholmes, V. (2014). *Fostering resilience and well-being in children and families in poverty: Why hope still matters*. New York, NY: Oxford University Press.
- Makovec, D. (2018). The teacher's role and professional development. *International Journal of Cognitive Research in Science, 6*(2), 33-45. <https://doi.org/10.5937/ijcrsee1802033>
- Marks, H. M. (2000). Student engagement in instructional activity: Patterns in the elementary, middle, and high school years. *American Educational Research Journal, 37*(1), 153-184.
<https://doi.org/10.3102/00028312037001153>
- Marzano, R. J., & Pickering, D. J. (2007). The case for and against homework. *Education Leadership, 66*(6), 74-79. Retrieved from
<https://www.lincnet.org/cbs/lib05/MAO1001239/Centricity/Domain/108/Homework.pdf>

- McFarland, J., Hussar, B., Zhang, J., Wang, X., Wang, K., Hein, S., Diliberti, M., . . . Barmer, A. (2019). *The condition of education 2019*. Retrieved from <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2019144>
- McLaughlin, M.W., Glaab, L., & Carrasco, I. H. (2014). *Implementing Common Core State Standards in California: A report from the field*. Retrieved from <https://www.edpolicyinca.org/publications/implementing-common-core-state-standards-california-report-field>
- McLeod, J. D., & Shanahan, M. J. (1993). Poverty, parenting, and children's mental health. *American Sociological Review*, 58(3), 351. <https://doi.org/10.2307/2095905>
- Mergendoller, J. R., Maxwell, N. L., & Bellisimo, Y. (2006). The effectiveness of problem-based instruction: A comparative study of instructional methods and student characteristics. *Interdisciplinary Journal of Problem-Based Learning*, 1(2), 49-69. <https://doi.org/10.7771/1541-5015.1026>
- Miceli, M., & Castelfranchi, C. (2000). Nature and mechanisms of loss of motivation. *Review of General Psychology*, 4(3), 238-263. <https://doi.org/10.1037//1089-2680.4.3.238>
- Miguel, D. S. (2019). The relationship between teachers beliefs, teachers behaviors, and teachers professional development: A literature review. *International Journal of Education and Practice*, 7(1), 10-18. <https://doi.org/10.18488/journal.61.2019.71.10.18>
- Milner, H. R. (2010). What does teacher education have to do with teaching? Implications for diversity studies. *Journal of Teacher Education*, 61(1-2), 118-131. <https://doi.org/10.1177/0022487109347670>

- Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record, 108*(6), 1017-1054.
Retrieved from one2oneheights.pbworks.com/f/MISHRA_PUNYA.pdf
- Moreira, P. A., Dias, A., Matias, C., Castro, J., Gaspar, T., & Oliveira, J. (2018). School effects on students' engagement with school: Academic performance moderates the effect of school support for learning on students' engagement. *Learning and Individual Differences, 67*, 67-77. <https://doi.org/10.1016/j.lindif.2018.07.007>
- Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: SAGE Publications.
- Munns, G., Hatton, C., & Gilbert, S. (2013). Teaching in low socio-economic status communities. In Munns, G., Sawyer, & W., Cole (Eds.), *Exemplary Teachers of Students in Poverty* (pp. 33-46). London, England: Routledge.
- Murnane, R. J. (2007). Improving the education of children living in poverty. *The Future of Children, 17*(2), 161-182. <https://doi.org/10.1353/foc.2007.0019>
- Nair, S. M., & Sanai, M. (2018). Effects of utilizing the STAD method (cooperative learning approach) in enhancing students' descriptive writing skills. *International Journal of Education and Practice, 6*(4), 239-252.
<https://doi.org/10.18488/journal.61.2018.64.239.252>
- Nariman, N., & Chrispeels, J. (2015). PBL in the era of reform standards: Challenges and benefits perceived by teachers in one elementary school. *Interdisciplinary Journal of Problem-Based Learning, 10*(1). <https://doi.org/10.7771/1541-5015.1521>
- National Center for Educational Statistics, Institute of Education Sciences. (n.d.a). *Fast facts: Back to school statistics*. Retrieved from <https://nces.ed.gov/fastfacts/display.asp?id=372>

- National Center for Education Statistics, Institute of Education Sciences. (n.d.b). *Fast facts: Dropout rates*. Retrieved from <https://nces.ed.gov/fastfacts/display.asp?id=16>
- National Education Association. (2002). *Backgrounder: Students from poverty*. Retrieved from http://www.nea.org/assets/docs/Backgrounder_Students%20from%20poverty_online.pdf
- National Education Association (2016, June). *Handbook: Teaching children from poverty and trauma*. Retrieved from http://www.nea.org/assets/docs/20200_Poverty%20Handbook_flat.pdf
- National Staff Development Council. (2001). *Standards for staff development*. Retrieved from https://gtlcenter.org/sites/default/files/docs/pa/3_PDPartnershipsandStandards/NSDCStandards_No.pdf
- Neuman, S. B., Kaefer, T., & Pinkham, A. M. (2018). A double dose of disadvantage: Language experiences for low-income children in home and school. *Journal of Educational Psychology, 110*(1), 102-118. <https://doi.org/10.1037/edu0000201>
- Nehring, J. H., Charner-Laird, M., & Szczesiul, S. A. (2019). Redefining excellence: Teaching in transition, from test performance to 21st century skills. *NASSP Bulletin, 103*(1), 5-31. <https://doi.org/10.1177/0192636519830772>
- Neutzling, M., Pratt, E., & Parker, M. (2019). Perceptions of learning to teach in a constructivist environment. *The Physical Educator, 76*(3), 756-776. <https://doi.org/10.18666/tpe-2019-v76-i3-8757>
- Nguyen, T. D., Cannata, M., & Miller, J. (2016). Understanding student behavioral engagement: Importance of student interaction with peers and teachers. *The Journal of Educational Research, 111*(2), 163-174. doi:10.1080/00220671.2016.1220359

- Oldenburg, B., Bosman, R., & Veenstra, R. (2015). Are elementary school teachers prepared to tackle bullying? A pilot study. *School Psychology International*, 37(1), 64-72.
<https://doi.org/10.1177/0143034315623324>
- Onwuegbuzie, A. J., Collins, K. M., & Jiao, Q. G. (2009). Performance of cooperative learning groups in a postgraduate education research methodology course. *Active Learning in Higher Education*, 10(3), 265-277. <https://doi.org/10.1177/1469787409343190>
- Panasan, M., & Nuangchalem, P. (2010). Learning outcomes of project-based and inquiry-based learning activities. *Journal of Social Sciences*, 6(2), 252-255.
<https://doi.org/10.3844/jssp.2010.252.255>
- Park, D., Gunderson, E. A., Tsukayama, E., Levine, S. C., & Beilock, S. L. (2016). Young children's motivational frameworks and math achievement: Relation to teacher-reported instructional practices, but not teacher theory of intelligence. *Journal of Educational Psychology*, 108(3), 300-313. <https://doi.org/10.1037/edu0000064>
- Parsons, S. A., Hutchison, A. C., Hall, L. A., Parsons, A. W., Ives, S. T., & Leggett, A. B. (2019). U.S. teachers' perceptions of online professional development. *Teaching and Teacher Education*, 82, 33-42. Retrieved from doi.org/10.1016/j.tate.2019.03.006
- Parsons, S. A., Metzger, S. R., Askew, J., & Carswell, A. R. (2010). Teaching against the grain: One Title I school's journey toward project-based literacy instruction. *Literacy Research and Instruction*, 50(1), 1-14. <https://doi.org/10.1080/19388070903318413>
- Patten, M. L., & Newhart, M. (2018). *Understanding research methods: An overview of the essentials* (10th ed.). New York, NY: Routledge.
- Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory into practice* (4th ed.). Thousand Oaks, CA: SAGE.

- Petre, A. (2017). The role of constant and continuous feedback on students' learning motivation. *Scientific Research and Education in the Air Force*, 19(2), 161-166.
<https://doi.org/10.19062/2247-3173.2017.19.2.23>
- Phillips, J., & Fusco, J. (2015). Using the jigsaw technique to teach clinical controversy in a clinical skills course. *American Journal of Pharmaceutical Education*, 79(6), 1-7.
<https://doi.org/10.5688/ajpe79690>
- Phillips, P. (2008). Professional development as a critical component of continuing teacher quality. *Australian Journal of Teacher Education*, 33(1), 37-45.
<https://doi.org/10.14221/ajte.2008v33n1.3>
- Pintrich, P. R. (2003). A motivational science perspective on the role of student motivation in learning and teaching contexts. *Journal of Educational Psychology*, 95(4), 667-686.
<https://doi.org/10.1037/0022-0663.95.4.667>
- Pintrich, P. R., & De Groot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, 82(1), 33-40.
<https://doi.org/10.1037//0022-0663.82.1.33>
- Pintrich, P. R., & Schunk, D. H. (2002). *Motivation in education: Theory, research, and applications*. Upper Saddle River, NJ: Prentice Hall.
- Polman, J. L. (2014). Dialogic activity structures for project-based learning environments. *Investigating Participant Structures in the Context of Science Instruction*, 22(4), 431-466.
<https://doi.org/10.4324/9781315045986-3>
- Rahayu, S., & Suningsih, A. (2018). The effects of type learning model numbered head together and think pair share. *International Journal of Trends in Mathematics Education Research*, 1(1), 19-21. <https://doi.org/10.33122/ijtmer.v1i1.27>

- Rahman, M. R. (2019). 21st century skill “problem solving”: Defining the concept. *Asian Journal of Interdisciplinary Research*, 2(1), 64-74. <https://doi.org/10.34256/ajir1917>
- Raviv, A., Cohen, S., & Aflalo, E. (2017). How should students learn in the school science laboratory? The benefits of cooperative learning. *Research in Science Education*, 49(2), 331-345. <https://doi.org/10.1007/s11165-017-9618-2>
- Reeves, D. B. (2000). *Accountability in action: A blueprint for learning organizations*. Edgewood, CO: Advanced Learning Press.
- Revelle, K. Z. (2019). Teacher perceptions of a project-based approach to social studies and literacy instruction. *Teaching and Teacher Education*, 84, 95-105. <https://doi.org/10.1016/j.tate.2019.04.016>
- Richards, L., & Morse, J. M. (2013). *Read me first: A user’s guide to qualitative methods* (3rd ed.). Thousand Oaks, CA: SAGE.
- Rivkin, S. G., Hanushek, E. A., & Kain, J. F. (2005). Teachers, schools, and academic achievement. *Econometrica*, 73, 417-458. <https://doi.org/10.1111/j.1468-0262.2005.00584.x>
- Robb, K. A., Simon, A. E., & Wardle, J. (2009). Socioeconomic disparities in optimism and pessimism. *International Journal of Behavioral Medicine*, 16(4), 331-338. <https://doi.org/10.1007/s12529-008-9018-0>
- Robin, B. R. (2008). Digital storytelling: A powerful technology tool for the 21st century classroom. *Theory Into Practice*, 47(3), 220-228. doi:10.1080/00405840802153916
- Rockoff, J. E. (2004). The impact of individual teachers on student achievement: Evidence from panel data. *American Economic Review*, 94(2), 247-252. <https://doi.org/10.1257/0002828041302244>

- Rolheiser, C., & Stevahn, L. (1998). The role of staff developers in promoting effective teacher decision-making. In C. M. Brody & N. Davidson (Eds.), *Professional development for cooperative learning: Issues and approaches* (pp. 63-78). Albany, NY: SUNY Press.
- Roseth, C. J., Johnson, D. W., & Johnson, R. T. (2008). Promoting early adolescents' achievement and peer relationships: The effects of cooperative, competitive, and individualistic goal structures. *Psychological Bulletin*, *134*(2), 223-246.
<https://doi.org/10.1037/0033-2909.134.2.223>
- Rotgans, J. I., Schmidt, H. G., Rajalingam, P., Hao, J. W., Canning, C. A., Ferenczi, M. A., & Low-Beer, N. (2018). How cognitive engagement fluctuates during a team-based learning session and how it predicts academic achievement. *Advances in Health Sciences Education*, *23*(2), 339-351. <https://doi.org/10.1007/s10459-017-9801-2>
- Rubin, H. J., & Rubin, I. S. (2012). *Qualitative interviewing: The art of hearing data* (3rd ed.). Thousand Oaks, CA: SAGE Publications.
- Ruzek, E. A., Hafen, C. A., Allen, J. P., Gregory, A., Mikami, A. Y., & Pianta, R. C. (2016). How teacher emotional support motivates students: The mediating roles of perceived peer relatedness, autonomy support, and competence. *Learning and Instruction*, *42*, 95-103.
<https://doi.org/10.1016/j.learninstruc.2016.01.004>
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, *55*(1), 68-78.
<https://doi.org/10.1037//0003-066x.55.1.68>
- Salmela-Aro, K., Kiuru, N., Leskinen, E., & Nurmi, J. E. (2009). School Burnout Inventory. *European Journal of Psychological Assessment*, *25*, 48-57.
<https://doi.org/10.1037/t01336-000>

- Sandelowski, M. (1995). Sample size in qualitative research. *Research in Nursing & Health, 18*(2), 179-183. doi:10.1002/nur.4770180211
- Santamaria, L. J. (2009). Culturally responsive differentiated instruction: narrowing gaps between best pedagogical practices benefitting all learners. *Teachers College Record, 111*(1), 214-247. Retrieved from <https://eric.ed.gov/?id=EJ826003>
- Santangelo, T., & Tomlinson, C. A. (2012). Teacher educators' perceptions and use of differentiated instruction practices: An exploratory investigation. *Action in Teacher Education, 34*(4), 309-327. <https://doi.org/10.1080/01626620.2012.717032>
- Sargent, J., & Ahmed, A. (2017). What is it for social impact? A review of literature and practices. *IEEE Technology and Society Magazine, 62-72*. Retrieved from <https://ieeexplore.ieee.org/iel7/44/8169142/08169158.pdf>
- Sauers, N. J., & McLeod, S. (2017). Teachers' technology competency and technology integration in 1:1 schools. *Journal of Educational Computing Research, 56*(6), 892-910. <https://doi.org/10.1177/0735633117713021>
- Schraw, G., Flowerday, T., & Lehman, S. (2001). Increasing situational interest in the classroom. *Educational Psychology Review, 13*(3), 211-224. <https://doi.org/10.1023/A:1016619705184>
- Schrum, L., & Levin, B. B. (2015). *Leading 21st century schools: Harnessing technology for engagement and achievement* (2nd ed.). Thousand Oaks, CA: Corwin Press.
- Sheehan, K., & Rall, K. (2011). Rediscovering hope: Building school cultures of hope for children of poverty. *Phi Delta Kappan, 93*(3), 44-47. <https://doi.org/10.1177/003172171109300311>

- Sheninger, E. (2019). *Digital leadership: Changing paradigms for changing times* (2nd ed.). Thousand Oaks, CA: Corwin Press.
- Siegle, D., McCoach, D. B., & Roberts, A. (2017). Why I believe I achieve determines whether I achieve. *High Ability Studies*, 28(1), 59-72.
<https://doi.org/10.1080/13598139.2017.1302873>
- Simon, N. S., & Johnson, S. M. (2015). Teacher turnover in high-poverty schools: What we know and can do. *Teachers College Record*, 117(3), 1-36. Retrieved from <https://eric.ed.gov/?id=EJ1056722>
- Simons, K. D., Klein, J. D., & Brush, T. R. (2004). Instructional strategies utilized during the implementation of hypermedia, problem-based learning environment: A case study. *Journal of Interactive Learning Research*, 15(3), 213-233. Retrieved from <https://www.learntechlib.org/primary/p/11284>
- Skinner, E. A., Kindermann, T. A., Connell, J. P., & Wellborn, J. G. (2009). Engagement as an organizational construct in the dynamics of motivational development. In K. Wentzel & A. Wigfield (Eds.), *Handbook of motivation at school* (p. 223-245). Mahwah, NJ: Erlbaum.
- Skinner, E. A., Kindermann, T. A., & Furrer, C. J. (2009). A motivational perspective on engagement and disaffection: Conceptualization and assessment on children's behavioral and emotional participation in academic activities in the classroom. *Educational and Psychological Measurement*, 69(3), 493-525. <https://doi.org/10.1177/001316440832323>
- Skinner, E., & Pitzer, J. (2012). Developmental dynamics of student engagement, coping, and everyday resilience. In S. L. Christenson, A. L. Reschly, & C. Wiley (Eds.), *Handbook of*

- research on student engagement* (pp. 21-44). New York, NY: Springer Science and Business Media.
- Skinner, E. A., Pitzer, J. R., & Steele, J. S. (2016). Can student engagement serve as a motivational resource for academic coping, persistence, and learning during late elementary and early middle school? *Developmental Psychology*, *52*(12), 2099-2117. <https://doi.org/10.1037/dev0000232>
- Smith, H. W. (1991). *Strategies of social research* (3rd ed.). Orlando, FL: Holt, Rinehart, and Winston.
- Springer, L., Stanne, M. E., & Donovan, S. S. (1999). Effects of small-group learning on undergraduates in science, mathematics, engineering, and technology: A meta-analysis. *Review of Educational Research*, *69*(1), 21. <https://doi.org/10.2307/1170643>
- Stronge, J. H. (2018). *Qualities of effective teachers* (3rd ed.). Alexandria, VA: ASCD.
- Swanson, E., McCulley, L. V., Osman, D. J., Scammacca Lewis, N., & Solis, M. (2017). The effect of team-based learning on content knowledge: A meta-analysis. *Active Learning in Higher Education*, *20*(1), 39-50. <https://doi.org/10.1177/1469787417731201>
- Tanguay, C. L., Bhatnagar, R., Barker, K. S., & Many, J. E. (2018). AAA + professional development for teacher educators who prepare culturally and linguistically responsive teachers. *Curriculum and Teaching Dialogue*, *20*, 87-104. Retrieved from <https://www.infoagepub.com/products/Curriculum-and-Teaching-Dialogue-Vol-20>
- Tarbutton, T. (2018). Leveraging 21st century learning and technology to create caring diverse classroom cultures. *Multicultural Education*, *25*(2), 4-6. Retrieved from <https://eric.ed.gov/?id=EJ1181567>

- Téllez, K. (2008). What student teachers learn about multicultural education from their cooperating teachers. *Teaching and Teacher Education*, 24(1), 43-58.
<https://doi.org/10.1016/j.tate.2006.07.014>
- Taylor, B. M. (2002). *Characteristics of teachers who are effective in teaching all children to read*. Retrieved from http://www.nea.org/assets/docs/HE/mf_char.pdf
- Taylor, S. J., Bogdan, R., & DeVault, M. (2015). *Introduction to qualitative research methods: A guidebook and resource*. Hoboken, NJ: John Wiley & Sons.
- Tran, V. D., & Lewis, R. (2012). Effects of cooperative learning on students at An Giang University in Vietnam. *International Education Studies*, 5(1), 86-99.
<https://doi.org/10.5539/ies.v5n1p86>
- Tsay, M., & Brady, M. (2010). A case study of cooperative learning and communication pedagogy: Does working in teams make a difference? *Journal of the Scholarship of Teaching and Learning*, 10(2), 78-89. Retrieved from
<https://eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=EJ890724>
- Tufford, L., & Newman, P. (2010). Bracketing in qualitative research. *Qualitative Social Work: Research and Practice*, 11(1), 80-96. <https://doi.org/10.1177/1473325010368316>
- U.S. Census Bureau. (n.d.). *Quickfacts: United States*. Retrieved from
<https://www.census.gov/quickfacts/fact/table/US/IPE120217#IPE120217>
- U.S Department of Education, & Office of Educational Technology. (2010). *Transforming American education: Learning powered by technology*. Retrieved from
<https://www.ed.gov/sites/default/files/netp2010.pdf>

- U.S. Department of Education, Institute of Education Sciences, & National Center for Education Statistics. (2018). *Student access to digital learning: Resources outside of the classroom*. Retrieved from <https://nces.ed.gov/pubs2017/2017098/index.asp>
- U.S. Department of Education. (n.d.). *College and career-ready standards*. Retrieved from <https://www.ed.gov/k-12reforms/standards>
- U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. (2019, January 12). *2019 poverty guidelines*. Retrieved from <https://aspe.hhs.gov/2019-poverty-guidelines#guidelines>
- Valencia, R. R. (2015). *Students of color and the achievement gap: Systemic challenges, systemic transformations*. New York, NY: Routledge.
- Vallerand, R. J., Pelletier, L. G., Blais, M. R., Briere, N. M., Senecal, C., & Vallieres, E. F. (1993). On the assessment of intrinsic, extrinsic, and amotivation in education: Evidence on the concurrent and construct validity of the academic motivation scale. *Educational and Psychological Measurement, 53*(1), 159-172. <https://doi.org/10.1177/0013164493053001018>
- Van Ryzin, M. J. (2011). Protective factors at school: Reciprocal effects among adolescents' perceptions of the school environment, engagement in learning, and hope. *Journal of Youth and Adolescence, 40*(12), 1568-1580. <https://doi.org/10.1007/s10964-011-9637-7>
- Vidourek, R. A., King, K. A., Nabors, L. A., Bernard, A. L., & Murnan, J. (2012). Teachers' perceived benefits and barriers to connecting students to school. *American Journal of Health Studies, 27*(3), 136–145. Retrieved from <http://www.va-ajhs.com>

- Voyles, E. C., Bailey, S. F., & Durik, A. M. (2015). New pieces of the jigsaw classroom: Increasing accountability to reduce social loafing in student group projects. *The New Psychology Bulletin*, 13(1), 11-20. Retrieved from <https://scinapse.io/papers/2230163670>
- Vygotsky, L. (1978). *Mind in society: The development of higher mental processes*. Cambridge, MA: Harvard University Press.
- Wade, W. Y., Rasmussen, K. L., & Fox-Turnbull, W. (2013). Can technology be a transformative force in education? *Preventing School Failure: Alternative Education for Children and Youth*, 57(3), 162-170. <https://doi.org/10.1080/1045988x.2013.795790>
- Walker, D., Greenwood, C., Hart, B., & Carta, J. (1994). Prediction of school outcomes based on early language production and socioeconomic factors. *Child Development*, 65(2), 606-621. <https://doi.org/10.1111/j.1467-8624.1994.tb00771.x>
- Warren, C. A., & Karner, T. X. (2015). *Discovering qualitative methods: Ethnography, interviews, documents, and images* (3rd ed.). New York, NY: Oxford University Press, USA.
- Warschauer, M., Knobel, M., & Stone, L. (2004). Technology and equity in schooling: Deconstructing the digital divide. *Educational Policy*, 18(4), 562-588. <https://doi.org/10.1177/0895904804266469>
- Warschauer, M., & Matuchniak, T. (2010). New technology and digital worlds: Analyzing evidence of equity in access, use, and outcomes. *Review of Research in Education*, 34(1), 179-225. <https://doi.org/10.3102/0091732x09349791>
- Wassermann, S. (2009). Growing teachers: Some important principles for professional development. *Phi Delta Kappan*, 90(7), 485-489. <https://doi.org/10.1177/003172170909000707>

- Wasserman, E., & Migdal, R. (2019). Professional development: Teachers' attitudes between online and traditional training courses. *Online Learning, 23*(1).
<https://doi.org/10.24059/olj.v23i1.1299>
- Wei, R. C., Darling-Hammond, L., & Adamson, F. (2010). *Professional development in the United States: Trends and challenges*. Retrieved from
<https://edpolicy.stanford.edu/sites/default/files/publications/professional-development-united-states-trends-and-challenges.pdf>
- Wenglinsky, H. (2002). The link between teacher classroom practices and student academic performance. *Education Policy Analysis Archives, 10*.
<https://doi.org/10.14507/epaa.v10n12.2002>
- Woolley, M. E., & Bowen, G. L. (2007). In the context of risk: Supportive adults and the school engagement of middle school students. *Family Relations, 56*(1), 92-104.
<https://doi.org/10.1111/j.1741-3729.2007.00442.x>
- Wurdinger, S., Haar, J., Hugg, R., & Bezon, J. (2007). A qualitative study using project-based learning in a mainstream middle school. *Improving Schools, 10*(2), 150-161.
<https://doi.org/10.1177/1365480207078048>
- Yang, C., Bear, G. G., & May, H. (2018). Multilevel associations between school-wide social-emotional learning approach and student engagement across elementary, middle, and high schools. *School Psychology Review, 47*(1), 45-61. <https://doi.org/10.17105/spr-2017-0003.v47-1>
- Zimmerman, B. J. (1989). A social cognitive view of self-regulated academic learning. *Journal of Educational Psychology, 81*(3), 329-339. <https://doi.org/10.1037/0022-0663.81.3.329>

APPENDIX A

Informed Consent

PEPPERDINE UNIVERSITY

(Graduate School of Education and Psychology)

INFORMED CONSENT FOR PARTICIPATION IN RESEARCH ACTIVITIES

Pepperdine University (Graduate School of Education and Psychology)

Best Practices in Student Engagement: Inspiring Teachers to Make a Difference with Students

Living in Poverty

You are invited to participate in a research study conducted by Andrea Steinfeld, B.A., M. A. at Pepperdine University because you fit the following eligibility requirements: (a) you teach at a Title I school; (b) you have a range of experience teaching at a Title I from 10 to 20 years; (c) you work in [REDACTED]; and (d) you agreed to participate in the study and agreed to be recorded. You should read the information below and ask any clarifying questions before deciding whether to participate. Please take as much time as you need to read the consent form. You may also decide to discuss participation with your family or friends. If you decide to participate, you will be asked to sign this form. You will also be given a copy of this form for your records.

Purpose of the Study

The purpose of the study is to explore the instructional practices of exemplary teachers to understand student engagement with students in poverty. Specifically, the purpose of this study is to determine: (a) the challenges that teachers face in engaging students in poverty; (b) the instructional strategies and practices that teachers can implement to facilitate academic success; (c) how the three dimensions of engagement provide a construct for analyzing academic achievement, and (d) what recommendations exemplary teachers have for future teachers.

Study Procedures

If you volunteer to participate in this study, you will be asked to participate in a semi-structured interview that will last for approximately 60 minutes. The semi-structured interview includes 10-12 open-ended questions that are designed in advance, with probes that are either planned or unplanned to clarify your responses. These types of questions will elicit valuable practices and strategies that current teachers employ to engage students living in poverty. During the interview, your answers will be recorded. If you choose not to have your answers recorded, you will not be able to participate in this study.

Potential Risks and Discomforts

There are minimal potential risks or discomforts associated with this study, however, sitting for approximately 60 minutes might cause fatigue. Furthermore, potential and foreseeable risks

associated with participation in this study include no more than minimum risks involved in day-to-day activities.

Potential Benefits to Participant

There are no direct benefits to the participant. Sharing the participant’s insights about engaging students in poverty, however, can benefit educational leaders, teachers, students, and ultimately society.

Confidentiality

The records for this study will be confidential. To protect the identity of your recorded responses, the recordings will be saved under a pseudonym and transferred to a USB flash drive, which will be kept in a locked file cabinet, in the researchers locked garage for at three-five years, at which point, the data will be destroyed. The researcher will use an outside agency to code the confidential interviews, and at no point during the research study will specific names be used. The researcher will code the interviews and store the data on a USB flash drive and store the data in a locked file cabinet in the researchers garage which will then be destroyed after three-five years. Your name, your specific location, or any other personal identifiable information will not be reported. Instead, a pseudonym with a generic organization name will be used to protect your confidentiality.

Rights of Human Subject

You may ask any questions concerning this research and have those questions answered before agreeing to participate in or during the study. For study questions, please contact Andrea Steinfeld at andrea.steinfeld@pepperdine.edu or by calling her at [REDACTED]. For IRB related questions, you may contact the university at [REDACTED] or email [REDACTED]

Participation and Withdrawal

Your participation is voluntary. Your refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled. You may withdraw your consent at any time and discontinue without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study.

Documentation of Informed Consent

You are voluntarily making a decision whether or not to participate in this research study. By signing the informed consent, your consent to participate is implied. You should print a copy for your records.

Name of Participant

Name of Researcher

Signed Consent of Participant

Signature of Researcher

APPENDIX B

IRB Approval Notice



Pepperdine University
24255 Pacific Coast Highway
Malibu, CA 90263
TEL: 310-506-4000

NOTICE OF APPROVAL FOR HUMAN RESEARCH

Date: January 13, 2020

Protocol Investigator Name: Andrea Steinfeld

Protocol #: 19-09-1150

Project Title: Best Practices in Student Engagement: Inspiring Teachers to Make a Difference With Students Living in Poverty

School: Graduate School of Education and Psychology

Dear Andrea Steinfeld:

Thank you for submitting your application for exempt review to Pepperdine University's Institutional Review Board (IRB). We appreciate the work you have done on your proposal. The IRB has reviewed your submitted IRB application and all ancillary materials. Upon review, the IRB has determined that the above entitled project meets the requirements for exemption under the federal regulations 45 CFR 46.101 that govern the protections of human subjects.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit an amendment to the IRB. Since your study falls under exemption, there is no requirement for continuing IRB review of your project. Please be aware that changes to your protocol may prevent the research from qualifying for exemption from 45 CFR 46.101 and require submission of a new IRB application or other materials to the IRB.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite the best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the IRB as soon as possible. We will ask for a complete written explanation of the event and your written response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the IRB and documenting the adverse event can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* at community.pepperdine.edu/irb.

Please refer to the protocol number denoted above in all communication or correspondence related to your application and this approval. Should you have additional questions or require clarification of the contents of this letter, please contact the IRB Office. On behalf of the IRB, I wish you success in this scholarly pursuit.

Sincerely,

Judy Ho, Ph.D., IRB Chair

cc: Mrs. Katy Carr, Assistant Provost for Research

APPENDIX C

Recruitment Script

Hello. My name is Andrea Steinfeld. I am a doctoral student in the Organizational Leadership Doctoral program at Pepperdine University's Graduate School of Education and Psychology. As part of fulfilling my degree requirements, I am conducting a study on characteristics of effective teachers in Title I schools in terms of engaging students with the goal of promoting positive school outcomes. I would like to invite you to participate in the study.

If you agree, you are invited to participate in an interview that intends to explore best practices in student engagement with students living in poverty. The purpose of this study will be achieved by identifying the challenges and successes that experienced teachers have in engaging students who live at or below the poverty line. Participation in the study is voluntary. Your identity as a participant will remain confidential during and after the study. Your name, the school you teach at, and any other personal identifiable information will not be reported. A pseudonym will be used for your name and school organization. Participation entails no longer than a 60 minute interview. Questions asked in the interview and an informed consent form will be sent to you in advance of the interview. Your participation in this study will be extremely valuable to new and aspiring teachers as well as other scholars and practitioners in the field.

I would like to ask if you would be willing to be interviewed as part of this study.

Thank you for your participation,

Andrea Steinfeld
Pepperdine University
Graduate School of Education and Psychology
Status: Doctoral Student

APPENDIX D

Peer Reviewer Form

Dear reviewer:

Thank you for agreeing to participate in my research study. The table below is designed to ensure that may research questions for the study are properly addressed with corresponding interview questions.

In the table below, please review each research question and the corresponding interview questions. For each interview question, consider how well the interview question addresses the research question. If the interview question is directly relevant to the research question, please mark “Keep as stated.” If the interview question is irrelevant to the research question, please mark “Delete it.” Finally, if the interview question can be modified to best fit with the research question, please suggest your modifications in the space provided. You may also recommend additional interview questions you deem necessary.

Thank you again for your participation.

Research Question	Corresponding Interview Question
<p>RQ1: What successful strategies are teachers using to support student engagement among low-income students?</p>	<p>Icebreaker: How many years have you been teaching? And at this school?</p> <p>Keep as is.</p> <p>Recommendation to add a question:</p> <p>IQ 1: How do you define student engagement?</p> <p>IQ 2: How many of your students are living in poverty?</p> <p>Delete question.</p> <p>IQ 3: What strategies do you use to engage your students?</p> <p>Revise: What strategies do you use to engage students in the classroom?</p> <p>IQ 4: Do you feel that the professional development at your school site helps you with student engagement strategies?</p> <p>Revise: How does the professional development at your school site help you with student engagement strategies?</p>
<p>RQ2: What challenges do teachers encounter in increasing student engagement?</p>	<p>IQ 5: What do you find to be your biggest challenge in engaging your students?</p> <p>Revise: What obstacles do you face in engaging students?</p> <p>IQ 6: Does the administration at your school site support you with your challenges?</p> <p>Revise: How does the administration at your school site support you with your obstacles?</p> <p>The following question was recommended:</p> <p>IQ 6: What additional resources would you need to feel better supported in increasing student engagement in your classroom?</p>
<p>RQ3: How do teachers measure success in developing student</p>	<p>IQ 7: How do you know that your students are engaged?</p> <p>Revise: How do you measure the level of student engagement in</p>

<p>engagement strategies among low-income students?</p>	<p>your classroom? IQ 8: How do you measure success? Test scores or do you use other measures? Delete question IQ 9: Have you received professional development on teaching students in poverty and the importance of student engagement for successful academic outcomes? Delete question The following question was recommended and after further review from the dissertation committee, the question was deleted. IQ 10: What is your ultimate goal in engaging students who live in poverty? Delete Question Recommendation to add the following question: IQ 11: How do you track or monitor engagement in your classroom?</p>
<p>RQ4: What recommendations would teachers provide to incoming teachers to promote a high level of engagement among low-income students?</p>	<p>IQ 10: If a new teacher approached you and asked what is a successful strategy in engaging students, what would you say? Revise: If a new teacher approached you and asked what is a successful strategy in engaging students living in poverty, what would you say? IQ 11: What other advice would you give a novice teacher? Revise: What other advice would you give to a novice teacher at a Title I school with regard to student engagement? IQ 12: Is there anything else you would like to add? Keep as is.</p>

APPENDIX E

Permission from Skinner and Pitzer

Ellen Skinner 

Inbox - a...epperdine.edu August 22, 2019 at 7:26 PM

ES

Re: Permission

To: Andrea Steinfeld 'student',  Jen Graham

You are welcome to use any of our charts. We are glad you find the chapter useful.

Ellen

On 8/22/19 3:56 PM, Andrea Steinfeld 'student' wrote:

Good afternoon Dr. Skinner and Dr. Pitzer,

My name is Andrea Steinfeld and I am a doctoral student at Pepperdine University in Los Angeles.

I am in my last year and I am working on my dissertation, *Best Practices in Student Engagement: Inspiring Teachers to Make a Difference with Students Living in Poverty*.

I have come across your chapter in the Handbook of Research on Student Engagement (Developmental Dynamics of Student Engagement, Coping, and Everyday Resilience) to be informative and inspiring. With your permission, I would like to use the chart that you have on page 25.

I look forward to hearing from you.

All the Best,
Andrea Steinfeld, M.A. Child and Adolescent Literacy
Doctoral Student - Education Doctorate in Organizational Leadership

--

Ellen A. Skinner
Professor & Chair
Psychology Department
Portland State University

APPENDIX F

Permission from the Director of Local District A (Pseudonym Used)

From: Steinfeld, Andrea <[REDACTED]>
Sent: Wednesday, December 4, 2019 10:48 AM
To: [REDACTED]
Cc: [REDACTED] <[REDACTED]>
Subject: IRB Approval

Good morning Mr. [REDACTED],

I hope you had a nice Thanksgiving Holiday with your family.

I am not sure if I told you when we last met, but I am in a doctoral program at Pepperdine University and I am currently writing my dissertation (my committee member is cc'd on this email).

My dissertation focus is on student engagement with students who live in poverty. I will be interviewing teachers in the Panorama Family of Schools (with their signed informed consent) to gather data on how experienced teachers engage students in Title I Schools, including strategies, strengths, and challenges.

I am going through the Institutional Review Board Process at Pepperdine to ensure all measures are taken to protect the participants. I assume that is sufficient for LAUSD, but I want to make sure that I do not need any other documentation to interview teachers, with their consent.

I look forward to hearing your response. I am defending my preliminary proposal this Saturday. I am confident that I am taking all necessary measures to protect the participant's confidentiality.

Thank you for your time,
Andrea Steinfeld, M.A.
Burton Elementary School
Intervention Coordinator

Hello,
Congratulations on going through the process. I believe you are correct, as long as the teacher gives you consent it should suffice. Best of luck.

Joseph [REDACTED]
[REDACTED]

APPENDIX G

CITI Completion Certificate



Completion Date 29-Mar-2018
Expiration Date 28-Mar-2023
Record ID 26561215

This is to certify that:

Andrea Steinfeld

Has completed the following CITI Program course:

GSEP Education Division (Curriculum Group)
GSEP Education Division - Social-Behavioral-Educational (SBE) (Course Learner Group)
1 - Basic Course (Stage)

Under requirements set by:

Pepperdine University



Verify at www.citiprogram.org/verify/?we3cb1e57-78c1-42f2-be0b-f7031bce8734-26561215