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Motivational Factors of At-Risk Students in Blended High School Credit Recovery

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College of Education

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Tyese L. Parnell

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Walden University
2020

Abstract

Motivational Factors of At-Risk Students in Blended High School Credit Recovery

Courses

by

Tyese L. Parnell

MA, Wayne State University, 2008

BS, Langston University, 2000

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Education

Walden University

August 2020

Abstract

Although the number of high school students taking online courses for an initial course or credit recovery (CR) is growing, it is not clear why at-risk students are not successful in blended CR courses. The purpose of this qualitative multiple case study was to explore teachers' perceptions and students' experiences related to at-risk students' motivation in blended CR courses. Keller's ARCS model of motivation for instructional design provided the framework for the study. Data were collected from interviews with 2 teachers, 5 students and from 2 school sites, face-to-face classroom observations, and online CR curricula. Data were analyzed through a priori coding and cross-case analysis aligned to the conceptual framework. Findings showed at-risk high school students' experiences related to motivation in blended CR courses were influenced by their attention being captured, finding relevance in the course, experiencing confidence while completing tasks, and finding satisfaction (internally and externally) throughout the course. Findings may provide school districts with information related to motivational strategies in CR courses. Findings may also provide an increased understanding of what motivates high school students in these courses and how teachers can better support at-risk students.

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Dedication

This dissertation is dedicated to my Lord and Savior Jesus Christ. Without him I realize that none of this would have been possible.

Acknowledgments

I would like to thank my parents, Bobby and Connie Washington, for their loving support and for always pushing me to believe that I could do anything I set my mind to. Although my dad isn't here to see me finish, I kept my promise and finished. To my hero, my mommy, thank you for always instilling a passion for greatness in me. Thank you to my best friend and twin, Tamia, for staying up with me countless hours while I worked on my paper. Thank you to my awesome children, D'Andrea and Dakota, for always believing in me and allowing me to work on my paper "undisturbed" ALL the time. Lastly, thank you to my amazing husband, who offered encouragement, love, and support while I chased my dream of completing my PhD journey. WE did it!

I would to thank Dr. Darci Harland for supporting, loving, and "gentle" nudges throughout this PhD journey. I will never be able to thank or repay her for the countless hours and endless energy that she provided over the years. Her continuous belief in my success is what carried me to the finish line. I have not been the best mentee, but she never gave up and stuck with me until the end. Thank you to my other committee member, Dr. Narjis Hyder, for your guidance and patience throughout this journey.

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Chapter 1: Introduction to the Study

Introduction

In 2001, the No Child Left Behind Act passed into action the term *credit recovery*
(CR) and mandated that all U.S. states set precise goals for improving test scores and
increasing high school graduation rates (Neill, Guisbond, & Schaeffer, 2004). With the
student dropout rate decreasing from 10.9% in 2000 to 6.1% in 2016, the positive effects
of alternative ways to receive credits to meet high school graduation were apparent
(McFarland et al., 2018). The emergence of CR and alternative schools to help at-risk
students pass courses needed to meet state graduation requirements offered them the
opportunity to complete coursework, recover credit, and get back on track. Blended CR
has been celebrated for its unique self-paced programming, engaging environment, and
teacher support system that is designed to meet individual student needs (Pettyjohn &
LaFrance, 2014). Despite the widespread growth of CR courses and software being one
of the fastest growing sectors of the educational software industry (Nourse, 2017), there
is a lack of scholarly research on what motivates at-risk high school students while they
are taking blended learning courses for CR they have previously failed.

There is no clear reason why some at-risk students drop out and what motivates
other students to stay in school, even if it means taking an alternative route to recover
courses they have previously failed to meet graduation requirements. Advances in
technology allow at-risk students opportunities to receive credits to graduate on time, and
provide different avenues to learn and have their learning assessed (Pettyjohn &
LaFrance, 2014). Although there have been studies done on CR courses, few have

focused on student experiences influenced by motivational factors and the effect of teacher motivation and belief in students on their overall success. The purpose of this qualitative case study was to explore teachers' perceptions and students' experiences related to at-risk students' motivation in blended learning CR courses. Results may inform instructors and policymakers on ways to improve blended learning CR courses to increase the possibilities of more students completing courses to meet graduation requirements.

Background

Research on student motivation and blended learning suggested that motivation is important for several student outcomes: student performances (Yli-Piipari & Kokkonen, 2014), persistence, and student satisfaction (Svanum & Aigner, 2011). The four elements of Keller's (2010) ARCS model of motivation can be used for promoting and sustaining motivation in the learning process: attention, relevance, confidence, and satisfaction. Maseleno et al. (2018) found that student attention and emotional engagement are the factors used to improve student learning in blended learning courses, suggesting that personalized learning is dependent on both. Research showed that the more relevant students perceive the courses they are taking, the better they do (Afip, 2014; Liu, Grady, & Moscovitch, 2017; Powell, Roberts, & Patrick, 2015). Research also showed that students are more motivated when they feel confident in the work they are doing (Futch, deNoyelles, Thompson, & Howard, 2016; Zhang & Han, 2012). Satisfaction is the fourth strategy that Keller (as cited in Kintu & Zhu, 2017; Stukalina, 2012) noted promotes and sustains motivation in the learning process. However, a gap existed regarding how

student motivation is shaped in high school blended learning courses in relation to attention, relevance, confidence, and satisfaction.

Research on CR and student experiences has been conducted for both online and the face-to-face (F2F) modalities, but little has focused on blended CR course experiences for students and teachers (Kaur, 2013; Poon, 2013; Powell, Roberts, & Patrick, 2015). Research has shown that there are benefits of blended CR courses technology, and the difference in the role that the teacher assumes (Blazar & Kraft, 2017; Greene & Hale, 2017; Miller & O'Brien, 2016). Despite this research, a gap existed in understanding the perspectives of at-risk students in relation to what motivates them.

Research showed that teacher perceptions about motivation exist with students taking blended CR courses (Blazar & Kraft, 2017; Carver, 2016). Teachers perceive motivation to be a major component in the teaching and learning process (D'Elisa, 2015). The literature revealed three common themes that teachers perceive about motivation: their role, time management, and student effort (DePietro, 2012; Gecer, 2013; Sarıtepeci & Çakır, 2015). Much of the research on blended learning has been done at the university level, leaving a gap on high schools. Research has revealed that teacher perception is an essential component to examine in courses taken by at-risk students. The literature revealed that teachers perceive students needing support and structure (Spilt & Hughes, 2015), love, acceptance, and relationships (Gehlbach et al., 2016). Research also showed that whether teachers' positive or negative perceptions have a direct influence on the students taking the course (McGrath & Van Bergen, 2015) and how teachers teach the course (D'Elisa, 2015). Although there was research on teacher perceptions and the

influence they have on students taking blended learning courses, a gap existed regarding teacher perceptions of blended learning and high school students.

Research has shown that effective design and pedagogy in online learning are important for increasing student achievement (S. J. Chen, 2014; Redmond, 2014). Research showed that the best online components of courses include effective communication (Kaur, 2013), differentiated instruction (Huang, 2016), and extra support for monitoring and tutoring when needed (Krasnova & Demeshko, 2015). Research also showed that blended learning courses offer flexibility (Staker & Horn, 2012), social interaction (Horzum, 2015), course monitoring and additional support when needed (Boelens, De Wever, & Voet, 2017), and an effective learning environment (Kaur, 2013). However, little was known about how the course design affects the success or failure of at-risk high school students in a blended learning CR course. The current study addressed students' experiences and teachers' perceptions of effective pedagogy and design of the blended CR course, and the effect they have on high school students' motivational factors while taking online courses for CR.

Problem Statement

The problem related to this study was the lack of understanding of why at-risk students are not successful in blended CR courses. According to the U.S. Department of Education (as cited in Corry & Carlson-Bancroft, 2014), online learning is one of the fastest growing trends in education. Within the last 16 years, virtual schooling has spread across 48 states and the District of Columbia (Hawkins, Graham, Sudweeks, & Barbour, 2013). Hawkins et al. (2013) also stated that a broader range of students is choosing

virtual schooling for the purpose of CR to fulfill a graduation requirement. The rate of students engaged in online learning for CR (or other such supplemental learning) is roughly twice that of those engaged in online learning as part of a full cyber-school program (Glass & Welner, 2011). According to Stevens and Frazelle (2016), students who need to recover multiple courses struggle with schoolwork in general because they have failed more than one course and therefore may have more difficulty completing additional courses. Additionally, the application of new technologies can be difficult, but online CR programs can address the national issue of students who drop out before graduating (Lieberman, 2015). The problem with online learning is that there is still no rigorous evidence related to the efficacy of online CR courses (Prewett, Bergin, & Huang, 2019).

Current research indicated that this problem is both relevant and meaningful to the field of education. The problem is apparent because the number of high school students taking online courses for an initial course or CR is growing (Stevens & Frazelle, 2016). If students lack motivation in online courses, there needs to be research on why before the problem gets worse. Exploring students' motivational factors in online learning courses may provide future resources and support for at-risk students, and may offer new opportunities for successful and meaningful learning experiences.

Studies related to high school CR learning indicated that five main factors affected learning experiences in online courses: learning, learning style, the immediacy of feedback, methods of content delivery, and issues around navigating content (Skordis-Worrall, Batura, Haghparast-Bidgoli, & Hughes, 2015). However, little research was

available on the role that motivation plays in how students fare in high school blended CR courses. According to Santoso, Schrepp, Isal, Utomo, and Priyogi (2016), although there is a growing interest in student experiences, there are still too few resources available to measure these experiences. Although some researchers have focused on developing quantitative instruments to determine properties of motivation in online courses (R. Johnson, Stewart, & Bachman, 2015), I explored the motivational factors qualitatively not only from student experiences but also from teacher perceptions. Although some studies addressed the perspectives of student experiences in CR courses (Harvey, Greer, Basham, & Hu, 2014), the current study was unique in that the entire learning environment of the CR courses was explored looking at both the online environment and the F2F environment. I expanded on current research about online CR learning and student motivation with a population of at-risk high school students. I endeavored to fill a gap by providing insight related to students' strengths and weaknesses linked to motivation in a blended learning environment, may improve the learning environment for these unique learners. Learners need to understand how to be successful while taking an online learning course, and need to understand the importance of being able to self-motivate during the process (Baird & Fisher, 2013). A better understanding of motivation issues in this nontraditional setting helps to improve learning conditions for these at-risk students (Usher & Kober, 2012). An investigation into the motivational factors of at-risk high school students in CR courses was needed to understand how online courses influence students' motivation and likelihood of success.

Purpose of the Study

With a continued focus of high school education on graduation rates and CR, finding ways to support and motivate students throughout this process remains essential. The purpose of this qualitative multiple case study was to explore teachers' perceptions and students' experiences related to at-risk students' motivation in blended CR courses. To fulfill this purpose, I interviewed students and teachers, observed learning environments, and reviewed the online curriculum using Keller's ARCS model of motivation.

Research Question

The research question (RQ) and subquestions (SQs) for this case study were the following:

RQ: How do perceptions and course experiences influence at-risk students' motivation in blended CR courses?

SQ1: What are at-risk high school students' experiences related to motivation in the blended CR course?

SQ2: How do CR high school teachers perceive at-risk student motivation in blended CR courses?

SQ3: How does the instructional design of the blended CR course influence the student motivational experience?

SQ4: How does the F2F component of blended CR courses influence the student motivational experience?

Conceptual Framework

The conceptual framework for this study was rooted in Keller's (1983) four-factor motivation model. This four-factor model is based on the macro theory of motivation and instructional design (Keller, 1983). The model is grounded in the expectancy-value theory used to improve the application of motivation within instructional materials (Keller, 1983).

The original model started as two categories that assumed people are motivated to engage in an activity if it is perceived to be linked to satisfaction of personal needs, and if there is a positive expectancy for success (Keller, 1983). Before the model became ARCS, the four categories were interest, relevance, expectancy, and outcomes (Keller, 1983). During the transition from the original model to the ARCS model, the four categories were renamed to strengthen the central feature and be used in the process of identifying and solving motivational problems in instructional materials and methods (Keller, 1983). Keller (as cited in Fraser Bates, 2015) designed the ARCS (attention, relevance, confidence, and satisfaction) model to help instructors design motivating curricula. Table I shows the variables that Keller associated with each of the categories of the ARCS model.

Table 1

Keller's ARCS Model of Motivational Design

Motivational factor	Variable descriptions
Attention	Perceptual arousal Inquiry arousal Variability
Relevance	Goal orientation Motive matching Familiarity
Confidence	Learning confidence Success opportunities Personal control
Satisfaction	Intrinsic reinforcement Extrinsic reinforcements Equity

According to Keller (2010), a person's motivation in regard to a topic can be increased if the topic gains the person's attention, if the topic is relevant to the person, if the person is confident they can master the topic, and if the topic is satisfying to the person. The ARCS model is also a useful tool for researching and applying motivational theory to other situations (Keller, 2010). Keller's ARCS model of motivation focuses on a student's attention ranging from solving simple problems to more challenging activities that stimulate curiosity (Keller, 2010). The ARCS model of motivation addresses whether a student can connect the content of instruction to important goals, interests, or learning styles (Keller, 2010).

Another characteristic of the ARCS model of motivation is confidence. Confidence is accomplished by helping students establish positive expectancies for success (Keller, 2010). The satisfaction characteristic of the ARCS model of motivation refers to the student's positive feelings about accomplishments and experiences (Keller, 2010). Keller's (2010) ARCS model of motivation focuses on a student's active participation, their use of humor, conflict, and a variety of real-world examples. The ARCS framework is a well-established motivational model and has been used in research to examine student motivation in online courses (Orji, Reilly, Oyibo, & Orji, 2019), motivating teachers to use technology in courses (Benson & Ward, 2013), improving students' attitudes in F2F courses (Yuan & Kim, 2014), students' perceptions and continued use of eLearning (Pinpathomrat, Gilbert, & Wills, 2013), and the design and presentation of web-based courses (Celis-Morales et al., 2015). In the current study, this model provided a contextual lens through which at-risk student motivation related to blended CR courses was explored. A more thorough explanation of this model is provided in Chapter 2.

Nature of the Study

The methodological approach for this qualitative study was a multiple case study. According to Yin (2014), the focus of the case study is to conduct an in-depth analysis of the case under study. A collective case study strategy allows the researcher to analyze multiple sets of qualitative data from multiple sources to achieve a more in-depth understanding of perspectives regarding a phenomenon or activity (Yin, 2014). Yin defined a case study in two parts. In the first part, Yin described a case study as a tool for

empirical inquiry in which the researcher explores a phenomenon in-depth. In the second part, Yin emphasized that case study research is a unique methodology in which the researcher collects data from multiple sources to examine multiple variables. I chose this research design to explore at-risk high school students' motivation in blended CR courses. A multiple case study design was appropriate for the study's purpose, which was to explore teachers' perceptions and students' experiences related to at-risk students' motivation in blended learning CR courses. The units of analysis for this case study were two high schools that offer blended learning CR courses. Each case included a minimum of two student interviews and one teacher interview. Student participants were CR students who met the following criteria: (a) 18 years or older, (b) taking the blended learning course as a repeat course, and (c) completed at least one CR module in blended learning. Teacher participants were classroom teachers of the CR courses who support at-risk students by setting weekly conference times, creating charts for progress, and supporting students as they work through the course. Data analysis was conducted on two levels. First, data were analyzed using a priori coding within a single case. At the second level, cross-case analysis was conducted to identify emerging themes and discrepancies to inform the key findings of the study (see Merriam, 2009).

Definitions

At-risk: The term originated in the 1983 report "A Nation At Risk" (National Commission on Excellence in Education, 1983). "Students at-risk of educational failure or otherwise in need of special assistance and support, such as students who are living in poverty, who attend high-minority schools (as defined in the Race to the Top

application), who are far below grade level, who have left school before receiving a regular high school diploma, who are at-risk of not graduating with a diploma on time, who are homeless, who are in foster care, who have been incarcerated, who have disabilities, or who are English learners" (Powell, Roberts, & Patrick, 2015).

Blended learning: In 2015, the Clayton Institute (as cited in Powell, Roberts, & Patrick, 2015) defined blended learning in three ways: a traditional education program that offers a portion of the course through online learning and the other portion done traditionally; a nontraditional learning environment that is not home-based; and a flexible learning opportunity that is individualized and students have control in when, how, what, and why they learn.

Credit recovery (CR) courses Courses offered to students to recover credit for courses they previously failed. A CR program is designed to allow students to retake one or more failed courses needed to meet state graduation requirements. CR courses are not courses taken for the first time; they are courses that students have previously failed and are needed to meet state requirements (Powell, Roberts, & Patrick, 2015).

Motivation: Keller (2010) noted there are four ways to promote and sustain motivation: attention, relevance, confidence, and satisfaction.

Online learning: Powell, Roberts, and Patrick (2015) defined online learning as an education source in which instruction comes primarily from the Internet (virtual learning, cyberlearning, and e-learning).

Assumptions

This study was based on several assumptions. The first assumption was that all participants would be open and honest during the interview, and would describe their experiences and perceptions clearly. This was an important assumption because it could have impacted the trustworthiness of the findings. The second assumption was that the documents provided by the school site would pertain to the curriculum and would be accurate and current. This assumption was also relevant to the study because documents in case study research provide evidence. The third assumption was that participants would be open and honest when describing their beliefs about what helps motivate them while taking blended learning courses. These assumptions were essential to the study because student and teacher perceptions related to course experiences about blended learning were important for future courses and the success of students.

Scope and Delimitations

The scope of this study included the boundaries of this study and the rationale for these boundaries. The case study methodology chosen for this study was one way the scope was defined. The case boundaries for this study included two high school settings that offered blended learning courses for CR, and the cases were defined as the site location, including the students, teacher, and curriculum used at that school. This scope was appropriate because it focused on a particular population (high school students in blended learning courses for CR).

This study was bounded by the purpose, which was to explore the phenomenon of motivational factors of high school students. Keller's (2010) ARCS motivation model

includes four elements in the learning process that can encourage and sustain learners' motivation. Although there is a variety of research that can be done on high school CR, this study focused on exploring how perceptions of course experiences influence students' motivation. The delimitations of this study involved the resources, time, and selection of student and teacher participants. This study was limited to high school students who were 18 years old and taking a blended learning course for CR, and teachers who were teaching a class or had some CR course teaching experience.

<div align="center">**Limitations**</div>

The limitations of this study were related to the qualitative case study design and the framework used to define what is meant by *motivation*. First, the study was limited by the research design. A case study is designed so that a phenomenon bounded with specific limits can be studied (Merriam & Tisdell, 2016). Therefore, only elements relating to CR blended learning environments and Keller's ARCS model of motivation were included. Although there were three data sources, the study was limited to the data found using those sources. Merriam and Tisdell (2016) indicated that a researcher might demonstrate bias by excluding data that contradicts the researcher's previous experiences and beliefs. As a secondary administrator in an urban school setting, I considered any potential personal bias. One way I worked to reduce researcher bias was to focus on the strategies recommended by Merriam (2009) and Yin (2014), including a priori coding and triangulation, credibility, transferability, dependability, and confirmability, to address the potential for researcher bias, as well as the time and selection of student and teacher

participants. I also kept a research journal, as recommended by Orange (2016). These strategies are presented in more detail in Chapter 3 regarding issues of trustworthiness.

Significance

The significance of this study was determined in relation to (a) advancing knowledge in the education field, (b) improving practice in the field, and (c) contributing to positive social change. This study on motivation in blended CR courses may help advance knowledge in the field of educational technology by providing insight about how motivation is influenced by instructional design elements of both F2F and online portions of blending learning courses, not only from teachers' perspectives and students' experiences but also from taking a closer look inside the online courses themselves. Numerous researchers have looked at this phenomenon of blended learning. However, few had explored the role that motivation plays in at-risk high school students' success while taking technology-heavy courses.

In relation to improving practice in the field of education, results from this study may contribute to future improvements to the design of blended CR courses. A better understanding of motivation elements may provide insight into how administrators, teachers, and course developers could better support students who take these courses. Instructional design changes, which take into account motivational factors, could lead to improved student experience in CR courses. Results from this study may also highlight ways teachers of blended CR courses could be better supported, and strategies for improving motivational factors when working with CR blended learning students.

Lastly, in relation to the positive contribution for positive social change, results from this study may influence the quality of blended CR courses, thereby improving the number of students who can graduate from high school. Findings from the study may provide school districts with valuable information about motivational factors in blended learning CR courses. Findings related to how teachers perceive blended learning in CR courses may lead to improved teaching and learning environments in which teachers and students work more effectively to meet the students' graduation goals. This study may contribute to positive social change by providing strategies linked to motivation that focus on attention, relevance, confidence, and satisfaction.

Summary

This chapter provided an introduction to this qualitative multiple case study on exploring how perceptions and course experiences influence at-risk student motivation in blended learning CR courses. The background section included a summary of the literature related to this study. The problem statement and purpose of the study were described. The RQ and SQs guiding the inquiry were provided. The conceptual framework section included an introduction to Keller's ARCS model of motivation, which focuses on attention, relevance, confidence, and satisfaction. In the section on the nature of the study, I provided an initial description of the multiple case study design for this research. The definitions section provided an overview of key terms for this study. In the scope and delimitations, as well as the limitations, I described the boundaries of this multiple case study. Chapter 1 concluded with a discussion of the significance of this study. Chapter 2 includes the literature search strategy for the literature review, the

conceptual framework for this study, and an extensive review of current research on the

key concepts of this study.

Chapter 2: Literature Review

Introduction

The purpose of this qualitative multiple case study was to explore teachers'
perceptions and students' experiences related to at-risk students' motivation in blended
CR courses. To accomplish this purpose, I explored the motivational factors from the
perception of students and teachers regarding students' blended learning experiences. The
problem related to this study was the lack of understanding of why at-risk students are
not successful in blended CR courses. The number of high school students taking online
courses as initial courses or CR is growing (Stevens & Frazelle, 2016). According to the
U.S. Department of Education, 89% of high schools nationwide offer at least one CR
course, and as many as 15% of all students take such a class (Loewenberg, 2020).
Although motivation has been shown to be critical for student success in high school
blended courses (Balentyne & Varga, 2017), motivation factors of at-risk students in
blended CR courses have not been explored. A better understanding of motivation around
student experiences in blended learning courses may be used to develop future resources
and support at-risk students so they have successful and meaningful learning experiences
and improved course outcomes.

Chapter 2 includes a review of the literature related to the purpose and problem of
the study. First, I describe the literature search strategy used for locating relevant and
meaningful studies. Then, I review the literature based on the following themes: CR,
student experiences, student motivation, teacher perception, and effective design and

pedagogy in blended courses. Finally, I summarize the major themes in the literature

review and address the gap in the literature.

Literature Search Strategy

In my review of the literature, I examined peer-reviewed journal articles and

sometimes dissertations, books, or research reports. The educational databases that I used

included Education Research Complete, Education Source, ERIC, and Academic Search

Complete. In addition to Walden University's databases, I used Google Scholar, Google

Books, Taylor & Francis, Education, and Source Combined Search, MERLOT, ProQuest

Central, and Teacher Reference Center. I also used regular search engines such as Google

and Yahoo to search for keywords and find sources related to my study. The searches for

literature published in the past 5 years led me to explore the following key terms: *John

Keller's ARCS model of motivation*, *at-risk students*, *CR*, *blended learning*, *student

motivation*, *teacher perceptions*, and *effective pedagogy* and *design in blended learning*. I

took each of the six themes and expanded keywords related to each to explore further

peer-reviewed articles and research conducted within the last 5 years (see Table 2). I

worked with the librarian at Walden University to ensure that my searches produced a

wide range of material. The two basic searches of blended learning and CR produced

over 500 studies for review.

Table 2

Research Themes and Key Words

Research Theme	Key Words
John Keller's ARCS model of motivation	Motivation, attention, relevance, confidence, and satisfaction
Credit recovery	Credit recovery online, credit recovery for at-risk students, credit recovery with blended learning, history of credit recovery
Blended learning	Blended learning and at-risk students, blended learning and credit recovery, blended learning and at-risk students, blended learning and student achievements, challenges of blended learning
Student motivation	Student motivation in blended learning, student motivation in credit recovery, student motivation in blended learning, student motivation and challenges, student motivation and at-risk student
Teacher perception	Teacher perception and blended learning, teacher perception and credit recovery, teacher perception and online learning, teacher perception and at-risk students, teacher perception of student success.

Conceptual Framework

I explored the phenomenon of motivation in at-risk high school students in

blended CR courses. The conceptual framework for this study was Keller's (2010) ARCS

model of motivation, a four-factor model for promoting and sustaining motivation

throughout the learning process. Keller's ARCS model is rooted in a number of

motivational theories and concepts, most notably expectancy-value theory. The ARCS

model is based on a synthesis of motivational concepts and characteristics divided into

four categories: attention, relevance, confidence, and satisfaction (Keller, 2010). The

model has been applied as a design for developing effective motivational instructional

strategies (DuPont, 2012). The model is a problem-solving approach to designing the motivational aspects of learning environments to stimulate and sustain students' motivation to learn (Keller, 2010).

Motivational theories have different purposes and focuses. For example, there are needs-based theories (Maslow's hierarchy of needs, ERG theory, two factory theory, acquired needs theory), theories related to business and management (Theory X and Theory Y, the Hawthorne effect; equity theory of motivation), process-based theories (equity theory, expectancy theory), and behaviorist motivation models (self-determination Theory, self-worth theory, social cognitive theory). However, Keller's ARCS model of motivation was chosen for this study for a number of reasons. First, it includes four elements for promoting and sustaining motivation in the learning process: attention, relevance, confidence, and satisfaction. Second, it is perceived as a problem-solving approach to learning that instructional designers can use to develop engaging activities in an online setting. Keller's (1987) ARCS model of motivation was a good fit for this study because it is a problem-solving approach to designing the motivational aspects of learning environments to stimulate and sustain students' motivation to learn.

The ARCS model is based on the idea that four elements in the learning process can encourage and sustain student motivation. This model was created to find effective ways to understand what influences student motivation and different ways to identify factors that increase it (Keller, 1987). When Keller (1979) began developing the ARCS model, there were no theories or models that focused on creating instruction that took learner motivation into account. A theory that Keller (1987) later found helpful with

researching motivation was the expectancy-value theory, which assumes students are motivated to participate in activities if satisfaction is linked to the outcome. The original ARCS model had two categories but was then expanded into four and renamed to strengthen the central feature and the catalog of strategies that identify and solve problems in instructional materials and methods (Keller, 1987).

Defining the Four Factors

Following its development, the ARCS model of motivation was field-tested in two in-service teacher education programs (Keller, 1987). The first teacher in-service was with 18 teachers of middle school children between the ages of 12 and 14 over a 4-month period twice a month for 1 hour. In the second teacher in-service, 16 teachers from primary, middle, and secondary schools were included. Unlike the first, which was done over 4 months, the second involved a 6-day session, and then 1 day during the month the teachers would participate in a working session. Then on another day in the month classroom visitations and consultation would occur. The results from the data collected showed the ARCS model was useful when used by course designers and teachers because it contributed to its effectiveness (Keller, 1987).

Attention. The first factor in Keller's (2010) ARCS model is attention. Keller defined attention as a person's interest in the concepts/ideas being taught. The attention factor incorporates research on curiosity, arousal, interest, boredom, and other related areas such as sensation seeking. Additionally, Keller suggested that when analyzing an individual or group of individuals for attention readiness, the degree to which the individuals will respond with curiosity and attention to the instructional material is an

essential element of the attention factor. At one extreme, the individuals can be understimulated (bored) and not likely to pay attention; at the other extreme, individuals can be overstimulated (hyper) and unable to keep their attention on anyone stimulus (Keller, 2010).

Keller (2010) subdivided the attention factor into three categories: perceptual arousal, inquiry arousal, and variability. Perceptual arousal refers to how changes (environment, sound, lesson) can affect a person's level of curiosity (Keller, 2010). These changes include voice level of the teacher, temperature of the learning environment, and information that is presented to the students (Keller, 2010). The second category of attention is inquiry arousal (Keller, 2010). The instructor works to stimulate curiosity and poses challenging questions or problems that need to be solved (Keller, 2010). Inquiry arousal is essential because it helps to reinforce materials and account for individual differences in learning styles and reminds instructors to use a variety of methods in presenting material (Keller, 2010). Inquiry arousal is used to stimulate curiosity and pose challenging questions or problems that need to be solved (Keller, 2010). Keller argued that a deeper level of curiosity is triggered when there is a problem that can be solved only with knowledge-seeking behavior. The third category of attention is variability (Keller, 2010). Variability in Keller's ARCS model is used to tap into different learning styles while reinforcing the methods by which students best learn. Variability is essential to motivation because it is another method that instructors can use to grab the students' attention (Keller, 2010). Teachers can consider each of these three categories within the attention factor to ensure arousal and duration of attention. In the current study, attention

was used to explore how well CR blended courses initiate and keep at-risk students' attention.

Relevance. Relevance is the second factor in Keller's ARCS model (2010). Relevance is an essential factor in determining a student's motivation to learn and is established by using familiarity with current life situations (Keller, 2010). Keller (2010), described relevance as the students' perceptions that the instructional requirements are consistent with their goals, compatible with their learning styles, and connected to their past experiences. Keller (2010) defines relevance as perceived relevance stating the students are goal-oriented and see the personal benefit as a positive motive in the course. In some situations, students will be indifferent or hostile if they perceive no relevance while taking courses (Keller, 2016). In other situations, the perceived relevance may connect to the importance of the course to students' future goal attainment. Before a student is motivated to learn, they have to perceive essential goals that are personal and purposeful.

Keller (as cited in Zaharias & Pappas, 2016) subdivided the relevance factor into three categories; goal orientation, motive matching, and familiarity. Goal orientation defined by Keller (2010) is when students perceive that important personal goals are being met in the learning situation. Motive matching is when students are assessed to determine whether they are learning because of achievement, risk-taking, power, or affiliation (Keller, 2010). It also focuses on giving the students choice on using the method that works best for them when they are learning something new. The third category of relevance is familiarity, which Keller (as cited in Zaharias & Pappas, 2016)

describes as where the instructor models what they want the student to do and uses student experiences to show them how they can use prior knowledge to learn.

According to Zaharias and Pappas (2016), five relevance strategies help increase motivation for students participating in online learning courses. Keller (2010) categorizes these five strategies as previous experience, perceived present worth, perceived future usefulness, modeling, and choice. When a student has the opportunity to make connections with new material learned and previous knowledge an increase motivation occurs. If a student perceives that there will be a personal gain or goal fulfillment to participate and complete an online, blended CR course, they feel more motivated to finish. Also, if a student recognizes the value in completing a blended online CR course, which could include graduating from high school and achieving future goals, they will be more motivated to finish. Keller (2010) also suggests the idea of modeling. If the instructor models work that should be completed in the blended CR course, the student will feel more motivated to complete assignments. The last strategy Keller (2010) emphasizes having is choice. When students are given a choice to select skills to master and work at their own pace, the potential for motivation increases. In this study, relevance will be used to explore the motivational factors of at-risk high school students in blended courses for CR.

Confidence. Confidence is the third factor in Keller's ARCS model. Keller (2010) wrote that "some people never quite achieve success even when the odds are in their favor; others always seem to excel through no matter what the odds" (p. 3). Confidence, defined by Keller (2010), relates to the students' sense of self-worth and

contributes to the opportunities that a student has to be successful (p. 51). Keller (2010) also refers to confidence as the effects of positive expectancies for success, experiences of success, and the attributions of success to one's abilities and efforts rather than to luck or to task challenge levels that are too easy or difficult. There are various strategies that instructors can use to successfully implement the confidence factor of the blended learning model. According to Keller (2010) these strategies include not giving the students all the information at once but having an introduction and building trust with the student before the main lesson is introduced. Instructors successfully implementing courses addressing the confidence factor of the blended learning model should provide students with success opportunities that are constructed to the level of the challenge that is appropriate to the student.

Keller (2010) subdivided the confidence factor into three categories; learning requirements, success opportunities, and personal control. Learning requirements are described as the learning standards and evaluative criteria and standards that students are given upfront to establish positive expectations for achieving success (p. 197). Success opportunities is the second category of confidence and is explained as using previous learning opportunities where students have had success to build entering the next learning experience (p.197). Keller (2010) describes personal control as the last category in the factor of confidence. Personal control is where confidence is increased if the student attributes their success to personal ability or effort, rather than external factors such as lack of challenge or luck (p.197).

Many students struggle with confidence and hesitate to participate in the learning process. Keller (2010) believes that students' confidence should be observed and that they feel most comfortable when they sense a course challenge. If a student feels unconfident, they will experience feelings of helplessness, and if they are overconfident, they will be cocky and believe they already know the concept or skill being taught (Keller, 2010). Instructionally, educators must have a curriculum that is clear with learning objectives, differentiates learning levels, and offers realistic learning expectations. In this study, motivation will be explored related to whether at-risk students experience confidence in their blended CR courses.

Satisfaction. Satisfaction is the last factor of Keller's ARCS model. Satisfaction concerns reinforcing "positive feelings for personal accomplishments" (Hauze & Marshall, 2020). Keller (2010) defines satisfaction as a condition required for motivation, which includes the appropriate mix of intrinsically and extrinsically rewarding outcomes that sustain desirable learning behaviors and discourage undesirable ones. Instructors enforce intrinsic reinforcement by encouraging and giving the students opportunities to apply the new skills in meaningful ways. Extrinsically the instructor rewards and recognizes student achievement.

Keller subdivided the satisfaction factor into three categories: intrinsic reinforcement, extrinsic rewards, and equity. Intrinsic reinforcement is used to encourage the pleasure of learning for its own sake or to achieve higher goals (Keller, 1987). Extrinsic rewards also play into satisfaction because it causes the student to focus more on the consequences rather than the actions, and can result in dysfunctional ways of

behaving, often because fear is a common factor. Finally, equity, the last category for the satisfaction factor that Keller (2010) describes maintaining consistent standards and consequences for learning success.

According to Keller (2010), there is a direct link between satisfaction and motivation levels of a student. Keller (2010) states that to reach satisfaction potential from a group of students perceiving how they feel about the course outcomes is essential. The instructors' role as it relates to satisfaction and student motivation in the online CR course allows the student to be the owner of his or her pace and mastery within a course. Once students' attention has been captured through engagement with the instructor, students are more connected to the course and its relevance (Harackiewicz, Smith, & Priniski, 2016). The instructor is then tasked to convince the students that they are capable of accomplishing the task at hand by creating goals and monitoring the progress. The student is then satisfied, and then the instructor can praise them with rewards (Keller, 2010). In this study, satisfaction will be used to explore intrinsic, extrinsic, and equity and its connection to at-risk student motivation in blended CR courses.

Previous Research Utilizing Keller's ARCS

Motivational strategies related to at-risk students have been studied using a variety of motivational models. Some research explored the motivation of at-risk students using Bandura's self-efficacy theory (as cited by Ohrtman & Preston, 2014), investigating the relationship between school failure and at-risk students' general self-efficacy, academic efficacy, and motivation. Other studies have looked at motivation and how instructors can increase motivation by encouraging students to do their best, setting

high expectations, and using lessons that involve higher-order thinking and collaboration and student participation, among other strategies (Hornstra, Mansfield, van der Veen, Peetsma, & Volman, 2015). ARCS model has also been used internationally to determine the effectiveness of overcoming the non-completion rate of students in distance education (Malik, 2014). Roby, Ashe, Singh, and Clark (2013) used ARCS to study elements of online learning, although not with at-risk students. ARCS model is the best conceptual framework for this study for several reasons. First, the ARCS model has been touted as a good model for designing online learning experiences. Hauze and Marshall (2020) believed that Keller's ARCS Model had many applications in online education, and when the elements of Attention, Relevance, Confidence, and Satisfaction are included, instructors can increase the motivation of students. Although the curriculum in the online component of the CR courses taken by at-risk students in this study was not designed with the ARCS model as an instructional design tool, other studies use the ARCS to frame students' motivational experiences. Another reason the ARCS model is an excellent conceptual framework for this study is that it was designed to help instructors enhance lessons with motivational strategies to affect student motivation levels (Reynolds, Roberts, & Hauck, 2017). Using the ARCS model may help identify strengths and weaknesses as they relate to high school students' motivation while taking blended CR courses. Therefore, the ARCS model is justified as a way to explore student motivational experiences in a blended CR course.

The research study benefited from this framework in several ways. First, the ARCS model was used to organize data collection. The ARCS model includes a

systematic design process that can be used with typical instructional design and

developmental models (Keller, 1987). It can conveniently be separated into steps to

define, design, develop, and evaluate. I designed the data collection instruments,

including interview questions and data collection forms designed to collect data related to

elements of motivation. These instruments allowed me to objectively collect and organize

data about teacher perceptions, student experiences, F2F classroom observations and

online course observations. Second, the ARCS model helped to answer the SQs during

the data analysis phase of the study. Each element of the ARCS model of motivation was

used to code student and teacher responses in interviews. The elements of the ARCS

model framework were used for a priori coding: attention, relevance, confidence, and

satisfaction and were linked to the responses from interviews, F2F classroom

observations and reviewing online curriculum and modules to explore motivational

factors of high school students in blended learning courses.

Credit Recovery Courses

As high school dropout rates continue to rise in the U.S., the idea of CR courses

was introduced as a nationwide initiative to help improve high school graduation rates

(Zinth, 2011). In 2017, the overall high school dropout rate was 5.4%, which was a

decrease from 9.7% in 2006 (McFarland et al., 2019). School districts across the nation

have been forced to take extreme measures in finding ways to support at-risk students and

help them make up needed credits to meet graduation requirements. According to the

National Center for Education Statistics (as cited by Powell, Roberts, & Patrick, 2015),

survey results found that online and blended learning courses offered a variety of courses

and allowed students to recover course credits they either missed or failed. In this next section, I synthesized the literature and organized the discussion into the history of CR, the benefits of high school blended CR programs, and end with the challenges of such programs.

History of Credit Recovery

CR programs started in 2001 with the NCLB Act that mandated all U.S. states set goals to improve test scores and increase high school graduation rates (Neill, Guisbond, & Schaeffer, 2004). Each state was required to set precise goals for improving high school graduation rates, and the act included accountability measures to track schools' progress (McCabe & St Andrie, 2012). The purpose of a CR program is to strengthen student's skills in weak areas and allow them to focus on difficult subjects and skip repetitious material already mastered (Picciano, Seaman, Shea, & Swan, 2012). CR refers to courses that students have previously failed and need to pass to earn credits to meet high school graduation requirements. CR has often been confused with initial credit courses. However, CR courses are not courses being taken for the first time. CR courses are for students who are attempting to recover credit by retaking a course because they were previously unsuccessful. A CR program is designed to allow students the opportunity to retake courses they have failed to earn credits towards graduation (Powell, Roberts, & Patrick, 2015). CR courses have evolved since 2001 and come in several forms, but each have the goal to help at-risk students meet graduation requirements (Pettyjohn & LaFrance, 2014).

CR is one of the fastest-growing areas of online education that can potentially have the most significant impact on helping at-risk students in high school meet graduation requirements. According to researchers Corry and Carlson-Bancroft (2014), results found that in the United States, nearly 30% of all high school students, an estimated 1.2 million students, are not graduating from high school and dropping out instead. Districts have developed various types of CR courses: F2F, online, and blended. The most popular type of course is the online mode, whereas elective courses are the most popular type in blended courses (Picciano, Seaman, & Day, 2011). Due to its popularity in education and the potential success of increasing graduation rates, school districts have started using online courses as an alternative way to take courses needed for CR (Powell, Roberts, & Patrick, 2015). Online CR, which started proliferating a decade ago, has turned into a booming business in which dozens of companies compete to sell school districts the latest versions of school courses. According to the Education Commission of the states (as cited by Zinth, 2011), policy definitions of "CR" run the gamut of "counseling students on graduation expectations" (p. 3) to spelling out the essential components of locally administered CR programs. With the rapid increase of online learning in U.S. high schools and the recent outbreak of the COVID 19 pandemic, it is estimated that nearly 75% offer some form of online courses (Shonfeld, Yildiz, & Judge, 2020; Watson, Murin, Vashaw, Gemin, & Rapp, 2013). In addition, it is estimated that 1.5 billion learners, across 191 countries, will be affected by the COVID-19 pandemic and implement various forms of distance learning (Gudmundsdottir & Hathaway, 2020). According to Powell, Roberts and Patrick (2015), CR online courses

have the highest enrollment rates and are especially crucial for urban schools (Corry &

Carlson-Bancroft, 2014). As CR continues to be one of the fastest-growing areas in

education, understanding the motivational factors of students taking blended courses for

CR will increase their opportunities for success.

Another form of online CR is blended learning. Blended learning CR offers a

mixture of online and F2F learning offering both the online component and having a

teacher available to give lectures and provide support (Harding, Kaczynski, & Wood,

2012). The blended learning model offers student choice, where a portion of learning

takes place in a school environment and the rest somewhere outside of school at a place

of their choice (Staker & Horn, 2012). Blended learning has been referred to as hybrid

learning, combining the best features of traditional schooling with the addition of

personalized learning (Powell, Roberts, & Patrick, 2015).

Blended learning is unique because it provides a combination of online models

and teaching models, which has shown to be an effective way to deliver meaningful

course material (Kaur, 2013) that differ from solely online, or solely F2F. According to

Yilmaz and Orhan (2010), neither online nor F2F learning has shown to fully engage

students. However, the blended learning model is a great way to address a lack of

interaction and differentiation for all students (Yilmaz & Orhan, 2010). In the fall of

2010, Insight Institute (as cited by Staker & Horn, 2012) conducted a market survey to

study and research on blended learning and was able to piece together four distinct

clusters of blended learning: Rotation, Flex, Self-Blend, and the Enriched Virtual Model.

Each model offers a unique way for students to learn. The rotation model allows students

to rotate on a schedule determined by a teacher, where at least one class is done online (Staker & Horn, 2012). The flex model, unlike the rotation model, is delivered primarily online where the students have a customized learning environment and a teacher to offer support (Staker & Horn, 2012). The self-blend model allows students to choose how they complete courses, whether it is all online, all traditional, or a mixture (Staker & Horn, 2012). Finally, the enriched virtual model offers the students the opportunity to split their time between a traditional school environment and an online learning model (Staker & Horn, 2012).

Blended learning used for CR is designed to give students online learning course work at school, but also have a teacher available for help. Blended learning is expected to enhance F2F instruction (Means, Toyama, Murphy, & Baki, 2013). Many consider blended learning applications that produce learning outcomes that are merely equivalent to those resulting from F2F without the enhancement of a waste of time and money because the addition improves student outcomes (Means et al., 2013). It offers students the flexibility to learn online with the support of teachers. Online learning now provides a flexible learning environment where time constraints are not an issue (Corry & Carlson-Bancroft, 2014). With flexibility and choice that online learning offers, students can learn in non-traditional ways, and the potential for motivation and engagement increases (Corry & Carlson-Bancroft, 2014). Students taking blended CR courses have the opportunity to work at their own pace but have the teacher's support when they have questions or concerns.

More recently, studies have examined the relationship between students' perceptions of blended learning and their course achievement. A study conducted by Poon (2013), described students feeling that the F2F sessions were beneficial because they were able to directly communicate with faculty and receive immediate feedback, support, and guidance. Additionally, students felt a positive connection between F2F and online learning environments (Poon, 2013). The blended learning course enabled student's opportunities for communication and feedback with peers and faculty, allowing them to gain confidence and put skills they are learning into practice (Smyth, Houghton, Cooney, & Casey, 2012). Online, blended learning courses promote student satisfaction, enabling the student to become more motivated and more involved in the learning process (Poon, 2013). Research conducted by Smyth et al. (2012) suggested that achievement in an online, blended learning course is influenced by the students' ability to take ownership in their learning process responsibility to self motivate outside of the classroom. As researchers continue to study online blended learning courses to understand students experiences and their perceptions, more changes will be made to course designs to meet needs, increase satisfaction, and course completion rates.

Benefits of Blended Learning for Credit Recovery

There are several benefits to offering blended learning courses for CR for all stakeholders—students, teachers, administrators and local school districts. Blended learning has the potential to benefiting students in CR. In the blended learning CR model students benefit because they are provided multiple ways to learn and are not just staring at a computer, but working with teachers and mentors that provide F2F, guidance, and

feedback. Research shows that students with access to a combination of learning (i.e., online and F2F) Excel and achieve more than students who are only exposed to one (Powell, Roberts, & Patrick, 2015). Another benefit of blended learning CR for students is the individualized online curriculum which allows students to skip content that they can demonstrate mastery within, and programs are presented in a self-paced style, which allows the student to work at their own time (Staker & Horn, 2012). Students value have the opportunity to work online from home and/or at school to complete course work at their own pace. In a qualitative study conducted by Pettyjohn and LaFrance (2014) at-risk students described having the most success in environments that were self-paced, personalized, offered diverse instructional methods, and facilitated by teachers that cared about students being successful. As students become more exposed to the benefits of blended learning for CR, they may view it as a viable option to help get on target to meet graduation requirements.

While much attention is given to the benefits of students in blended learning for the CR model, there are also benefits for the instructors. One benefit for instructors, potentially leading to increased student achievement in a blended learning course, is the development of meaningful relationships and being able to establishing trust with students (Gutierrez & Buckley, 2019). Although there is little research exploring the instructor's role on how students progress online through the blended CR courses, their role in F2F courses has shown to be critical to student success (Roby et al., 2013). It might also be assumed that teacher-student relationship is important in the blended courses. In blended classes, teachers may have more time to foster relationships with

timely feedback and individual check-ins. Instructors are vital supporters of students in CR courses, and their evaluation of the processes and procedures of these programs are crucial for improving the courses and managing resources (Pettyjohn & LaFrance, 2014). Instructors of these blended learning CR courses may be certified teachers or uncertified proctors, who oversee and aid the students as needed during the course (McCabe & St Andrie, 2012) but act more as facilitators. As facilitators in the blended CR classroom, teachers are granted freedom from lesson planning allowing more time to be spent with students setting course goals and creating plans for achieving those goals.

Additionally, instructors must become familiar with the learning systems and leverage the classroom time using best practices to help students master the skills needed to complete the course. The blended learning model offers benefits to instructors because there are greater flexibility and accessibility without sacrificing F2F contact (Kaur, 2013). Benefits for instructors of blended CR courses are related to the increased time they have to spend with students in the F2F portion of blended courses.

Offering blended CR courses to students also benefits school districts. One benefit for school districts includes the cost as it compares to traditional learning. Costs are potentially reduced because staffing and student contact time is reduced in the blended learning model (Poon, 2013). Public school districts historically have had relatively little budget flexibility because much of their budget is tied to multiyear contracts, tenured staff, and other fixed obligations (Battaglino, Halderman, Laurans, Finn, & Fairchild, 2012). A virtual school can save approximately $3600 per student significantly reducing school operation costs with a savings of more than a third over a traditional school

(Battaglino et al., 2012, p. 60). Another benefit for districts is it offers additional ways at-risk students can graduate, increasing graduation rates (Darling-Hammond, Zielezinski, & Goldman, 2014b). With the continued growth of blended CR in districts nationwide to increase student graduation rates and decrease dropout rates, finding the means to evaluate effectiveness of such programs to for at-risk students will be necessary.

Challenges of Blended Learning for Credit Recovery

Although there are many benefits to using blended learning for CR, there are also challenges. One set of challenges is related to broader system issues. The first system issue is tension that lies between high school graduation rates and high academic standards. With pressure coming from federal and state requirements, districts have lowered the bar of academia to push students through to graduation (Picciano et al., 2012). However, if districts start tracking data to measure courses taken verses courses completed, data can be used to show the effectiveness of these programs or suggest adjustments that can be made to ensure students' needs are being met with rigor. Another challenge of blended learning for CR is the assumption that students have access to technology outside of school. Rural students lacking Internet access at home could face difficulty in their ability to complete the online CR courses (Miller & O'Brien, 2016), and the same has traditionally been true for at-risk students (Pettyjohn & LaFrance, 2014). With the continued growth of districts using the blended learning model for CR, it will be essential schools to consider funding for individual student technology in their budgets.

Another challenge with blended CR courses is access to data measuring effectiveness. Data collection for blended learning is not readily available from state to state because it is not a recognized category in state reporting (Greene & Hale, 2017). There are very few school districts that use online learning to collect specific data that tells why students prefer this type of course, how the students are performing in the course, and the different ways these courses are used within the school (Clements et al., 2015). However, in Michigan, one of the states that collects virtual data, in 2018-2019, there were 8% of students (120,000) taking at least one virtual course with a 55% pass rate (Freidhoff, 2018). According to the Center for Public Education (as cited by McCabe & St Andrie, 2012), there are significant system challenges to CR and currently no real way to effectively measure what is working and what needs to be adjusted. Since CR is a local effort, little data are available on the rigor or effectiveness of the programs (p. 1). Each school district has different qualification requirements for teaching or facilitating these courses (McCabe & St Andrie, 2012). CR classes lack rigor and reward students who do not work hard in their first attempt at taking a traditional course to take an easier version (p. 1). Another challenge of blended CR courses is recording grades on transcripts because states and districts have not adopted a uniformed way across the board, there have been questions raised over fairness (McCabe & St Andrie, 2012). The lack of consistency in data collected from these programs make it difficult to know how many at-risk students have taken and completed blended CR courses. Therefore, it is difficult to measure how successful blended learning CR programs are in helping students

meet graduation requirements. Research is still needed to examine high school blended CR courses and how their overall effectiveness.

Another set of challenges with blended CR courses relates to teachers and their experiences with technology. Teachers', in general, struggle with the integration of technology in their classrooms (Farjon, Smits, & Voogt, 2019). If teachers are adequately trained on how to use the technology in blended courses, their experiences will be different, and they can better support the students. In a recent study focused on the importance of teachers integrating and using technology within their blended learning class (Alammary, Sheard, & Carbone, 2014) researcher's found that teachers needed the knowledge to identify which technological tool is needed to meet a specific pedagogical goal and how to support students appropriately when using technology tools in different phases of the learning process. Another study done by Adelstein and Barbour (2016) directly addressed the importance of teacher training, stating that the effectiveness of blended learning is based directly on how well teachers are trained. As more research is done in the classroom on teachers' experiences with technology, training and support strategies can be developed to help them be more successful when working with students in an online learning environment.

Another challenge for teachers in blended recovery courses is their shift from content expert to course facilitator. Although teachers may not be certified in the subject area of the course a student is taking, if they are trained on different ways to support the student and have available resources, both teacher and students have the best opportunity to be successful (Greene & Hale, 2017). With the transition of teachers' roles in an online

course, it is important to make sure there is adequate support and training as they move into this position. Studies conducted by Pajares (1992) acknowledged the difficulties teachers face with change as it relates to their beliefs and practices. Teachers resist change because they lack motivation, fall short of knowledge and expertise to modify existing curricular materials, and avoid risk-taking with contradictory to their current practices (Tam, 2015). As school districts try to offer more opportunities for students to meet and achieve graduation requirements, proper training and support for teachers' shifting from content expert to leaning facilitator is critical so students enrolled in the blended recovery courses can be successful.

Last, there are challenges of blended CR courses related to students and motivation. CR courses often require students to have proper time management and be self-motivated, and research has highlighted that students without these qualities have issues that arise (Pettyjohn & LaFrance, 2014). Students interviewed in their qualitative study revealed that they felt challenges from coursework, motivation, technology, and internal/external struggles (Pettyjohn & LaFrance, 2014). Other challenges that affected student success from the study included students that had previously struggled in math, lacked self-motivation and time management skills (p. 213). Challenge that were described from another study conducted by Greene and Hale (2017) found that students struggled with not keeping up the same pace as students in a classroom, and that isolation from other students may cause social problems. Although more studies need to be conducted, several impacts of learning environments in relation to learning outcomes have found that students feel isolated, confused, frustrated, and lacking interest in the

subject area they are studying (Ni, 2013). As more data is collected about students and what makes them feel motivated in the online learning environment, courses can be altered to meet their needs. The literature suggests that student perspectives on motivation, course strategies, building relationships, and the tools they use to cope are all important (Poon, 2013; Yuan & Kim, 2014). Research shows that motivation is essential when students learn online, this also applies to the blended learning online. However, more research is needed with at-risk students taking blended learning courses for CR.

The literature related to blended CR courses and the characteristics of the challenges and benefits of blended learning as they relate to CR include studies about different types of online programs and the benefits they have for all stakeholders. The gap in the literature is that little is understood about student motivational factors of various blended high school CR courses and whether these contribute to the benefit or challenges of these CR courses. This study expanded on the role that motivational factors contribute to students' perceptions of success in online CR courses. Research on CR has mostly been confined to online CR. My study explored the motivational factors of online high school students in blended CR courses and how motivation may play a role in learning environments.

Student Experiences and Perceptions of Blended Learning

Students' perceptions and experiences in blended learning courses are essential since student satisfaction is widely linked with various education outcomes (Hixon, Barczyk, Ralston-Berg, & Buckenmeyer, 2016). Blended learning has emerged as one of the most popular pedagogical concepts in higher education (Halverson, Graham, Spring,

Drysdale, & Henrie, 2014), and scholars predict that blended learning will become *the new traditional* model in course delivery (Henrie, Bodily, Manwaring, & Graham, 2015). Some researchers suggest that although student perspectives and preparation for a course need to be considered, their perception of how they will do in the course is just as important (Hixon et al., 2016). When considering students' overall experiences and perceptions of online learning, it is important to understand what characteristics they find satisfying and how it is linked to their success. One line of research, important to my study in particular, indicated that it is important to understand student motivation in blended courses because it accounts for their engagement and success in school (Vanslambrouck, Zhu, Lombaerts, Philipsen, & Tondeur, 2018). In the following review of the literature, I discussed student experiences and perceptions organized by themes related to the student view of advantages and barriers to learning in the blended model.

Student Perceived Advantages

The literature showed that students perceived many advantages in taking blended courses. The first theme in the literature is related to the flexibility blended learning allows students to have while taking a course. With school districts looking for ways to decrease dropout rates and increase graduation, the online and blended learning option offers students the flexibility to either stay on track or get on track before their senior year (Powell, Roberts, & Patrick, 2015). There are many variations of flexibility in online and blended learning courses, which means that students have easier access to learning, the convenience to choose where they work and learn, and the ability to schedule school around their lives (Daniel, 2016). In this study, almost all students appreciated online

courses' flexibility because it allowed them to use their time more efficiently (Daniel, 2016). Another study devoted to high school student's perceptions of blended learning environments found that web-based learning was more suitable, reachable, and promoted the independence of learning and positive interactions through flexibility and ease (Kavitha & Jaisingh, 2018). Most students that take online courses find that these classes help them better balance their overall lives. Some students take these online courses at school, with the flexibility of working from home and not having to drive or catch a bus to school. Flexible learning is a defining element of blended learning and important when considering ways to give students more opportunities to complete courses needed for graduation.

Another perceived advantage shown in the literature was that students felt blended learning allowed them to receive better support from teachers. In a study done by Pettyjohn (2012), high school students revealed a self-awareness of regarding the expectations of experiencing success in online learning but expressed the need for teacher support. In another study, undergraduate and postgraduate students expressed a preference for the inclusion of F2F sessions with blended courses because it provided them with the opportunity for immediate support and the ability to speak directly with a teacher or facilitator when they needed it (Poon, 2013). Students in another postgraduate program also believe that the F2F component and their peers' connection enhances the experience and offers another positive aspect in the online and blended learning environment (Smyth et al., 2012). In a report done supporting at-risk students taking classes online, students noted that the availability of teacher support for learning

challenging concepts online and for helping them overcome moments of confusion when they were working through ideas on the computer was critical (Darling-Hammond et al., 2014b). According to student perspectives and experiences, they need support from teachers/facilitators to be successful while blended learning courses. As teachers/facilitators learn different ways to support their students while taking blended learning courses, student-teacher interactions will change and relationships will grow.

The literature also showed that students perceived increased communication as a critical advantage to blended learning. Communication is an essential component in blended learning courses and needs to be done promptly, so there is no disconnect in learning with the absence of a teacher (Tichavsky, Hunt, Driscoll, & Jicha, 2015). Students need to feel safe, know expectations, be comfortable asking questions, and held accountable to course goals which will lead to completion of course requirements. Students have suggested that one factor that increases their satisfaction in blended learning is having continuous access to an instructor (Owston, York, & Murtha, 2013). In a study conducted by Barbour, McLaren, and Zhang (2012), students rated specific communication tools that increased overall satisfaction while taking online courses and virtual classrooms and included email and discussion forums. These tools are ones that connect the student directly to the teacher. In a qualitative study that examined minority high school students and factors that promoted their learning experience, one of the seven factors that students believed were most effective for their success was student-teacher interaction and open communication (Kumi–Yeboah, Dogbey, & Yuan, 2018). These types of interactions and communication included group discussions, forums, online

chats, and emails. The findings from this study revealed open communication increased their engagement in course discussions and contributed to their understanding and achievement throughout the course (Kumi-Yeboah et al., 2018). Collectively these studies show that students seek connectedness to the instructor to ensure their success in blended courses.

Student Perceived Barriers

Along with the benefits students experience and perceive related to blended learning, there are also barriers. There are many reasons why students struggle while taking blended learning courses; the first is lack of motivation. Motivation contributes to the choices that students make, their level of engagement, their effort in class, and their persistence in their overall learning process (Ushioda & Dörnyei, 2011). In a qualitative study conducted by Schober and Keller (2012), where factors that influence student motivation were researched high school students, ages ranging from 15-19, believed that the workload was hard to handle and lost even more time away from work and family trying to figure it out. In another study students described their feelings as unfavorable because they lacked motivation and had poor time management, which impacted their lack of success (Pettyjohn & LaFrance, 2014). Understanding the role that motivation plays in a students success while taking a blended learning course is critical. In another study done on providing chances for high school students to recover credits in a blended program, students described one of the challenges of blended learning program as lack of motivation and struggled to not drop out (Lewis, Whiteside, & Dikkers, 2014). The purpose of more research and collecting data was to help determine motivational factors

that contribute to high school students being motivated in online and blended learning courses.

A second perceived challenge to blended learning is that the classroom experience can feel isolating. Smyth et al. (2012) found that postgraduate nursing and midwifery students believed the blended learning approach was isolating and lacking opportunities to interact with their peers socially. This study also highlighted how the blended learning model was invasive in students' everyday lives, and they found no difference between taking courses at home or school (Smyth et al., 2012). According to Beauchamp (2015), students also felt that F2F contact was necessary between the student and teacher when working on concepts that were hard to understand in a blended learning course. In another qualitative study discussing student perceptions and experiences, some of the main challenges associated with blended learning are time management, workload, course design barriers, and personal barriers (Gedik, Kiraz, & Ozden, 2012). More research needs to be done finding ways to make students feel supported, safe, and prepared, not isolated while taking an online, blended learning courses.

The literature also showed students perceived flexibility as a barrier. Although flexibility is seen as an advantage for some while taking blended learning courses, too much flexibility is a problem for other students because of time management struggles. Researchers Lewis et al. (2014) found that at-risk students often struggled with these benefits because other personal challenges arise. In a study done by Poon (2013) on student perceptions in blended learning, environment students assumed that fewer classes meant less work, but did not truly understand the organization and management needed to

be successful. The research found that the most successful online learner has characteristics that included: commitment, flexibility, and independence (Lewis et al., 2014). More research is needed to explore how flexibility can be monitored to better support students taking these courses.

The literature related to student experiences and perceptions of blended learning courses ranges from college graduate students to high school students. Student perceptions of blended learning have been explored with graduate students (Smyth et al., 2012), undergraduate students (Beauchamp, 2015) and some high school students (Lewis et al., 2014), but only a handful of studies have explored student perceptions in CR blended courses (Lewis et al., 2014). However, the gap that remains within those studies is that little is understood about the student motivational factors while taking blended courses for CR. This study expanded on the role that motivational factors contribute to students' perceptions of success in online CR courses to meet graduation requirements. Lewis et al. (2014) suggested that more studies focus on at-risk students and their experiences in the virtual learning environment and use the findings to create and design courses with an environment that supports these needs more precisely. Research on CR has mostly been confined to online CR. However, my study explored the motivational factors of online high school students in blended CR courses and how motivation may play a role in learning environments.

Student Motivation

Student motivation is an essential factor blended learning that affects student outcomes while taking these courses. Research has shown motivation explains student

performance (Svanum & Aigner, 2011; Yli-Piipari & Kokkonen, 2014). Student

motivation has also been found to influence student satisfaction and predict how

persistent students are when taking blended learning CR courses. Student motivation has

a profound effect on student effort and achievement; more information is needed on how

student motivation is shaped (Vanslambrouck et al., 2018). In the following review of the

literature, I discussed student motivation as it relates to blended learning through

satisfaction, confidence, relevance, and attention.

Attention

Researchers have placed a growing emphasis on attention and what affect it has

on students while taking blended learning courses. Keller (2010) stated three questions

that teachers (and instructional designers) need to consider when trying to gain and keep

learner attention: What can I do to capture their interest? How can I simulate an attitude

of inquiry? And how can I maintain their attention? The National Survey of Student

Engagement (NSSE) (as cited by Vaughan, 2014) defined student engagement as the

amount of time and effort that students put into their classroom studies that lead to

experiences and outcomes that constitute student success and the ways that the institution

allocates resources and organizes learning opportunities and services to induce students

to participate in and benefit from such activities. In a study on student emotional

engagement and the analytics used to improve student learning in blended learning

courses, Maseleno et al. (2018) suggested that personalized learning is dependent on both

student and teachers.

As more research and data collection is done on student attention, focusing on capturing, stimulating, and maintaining attention will be important for future course design and development. Although most research is being done on capturing student attention, once attention is gained, it will be important to maintain it. Keller (2010) suggested that attention could be obtained either by perceptual arousal or by inquiry arousal.

Perceptual arousal. One of the questions that Keller focused on in the ARCS model of motivation when showing the importance of student attention was *perceptual arousal*: What can I do to capture interest? With perceptual arousal, the learner's attention is gained by doubt, surprise, or disbelief, while in inquiry arousal; the learners are stimulated by challenging problems that need to be solved (Keller, 2010).

In order to understand how students learn, what works best for them, and what needs to be done to support them while taking blended learning courses, being able to capture their interest is a priority. Previous research focused on student engagement to address boredom, alienation and dropout rates but not specifically on student experiences (Fredricks, Blumenfeld, & Paris, 2004). Student engagement, unlike other factors, can be positively changed with intervention, context and environment (Lawson & Lawson, 2013).

Multiple strategies have been employed to gain student attention, and collaborative learning has been one such strategy. One study surveyed students on the impact collaborative learning had on the environment and engagement, finding that students enjoyed using different tools in their learning (Vaughan, 2014). Another study

found showed student motivation and engagement levels increased when lessons were real-life and relevant to their daily lives (Aşıksoy & Özdamlı, 2016). Jeffrey, Milne, Suddaby, and Higgins (2014) discussed the role that curiosity and personal relevance play to learning, their importance in the early stages of the blended learning course, and how they have been found to increase student motivation and help them achieve personal goals. Researchers should continuously collect data on what strategies work best for capturing student attention related to motivation while taking blended learning courses and provide teachers with professional development, so students have the best opportunity to be successful.

There are many ways to achieve success and create an environment of learning. Capturing a student's attention should be the first step (Jeffrey et al., 2014). Research has shown that student attention can be gained in a number of ways in blended learning courses. The first strategy of capturing a student's attention and increasing motivation is to use curiosity and create an environment where students want to participate in the lesson (Jeffrey et al., 2014). The second is strategy is using humor. According to Redmond (2014), teachers' roles are different when moving from F2F to blended learning where they must have three categories of teaching presence--instructional design and organization, facilitating discourse and direct instruction--which all focus on student attention in different ways. One specific strategy for capturing attention is the use of humor. Humor is a strategy the focuses on the cognitive, affective, and psychomotor skills of teaching that increase the active learning environment (Alkhattab, 2012). In a study conducted by Alkhattab (2012) humor was explored with students in an

undergraduate nursing program, the results indicated that the students appreciated having it in the classroom because it reduced anxiety, increased relationships and communication and helped build trusting relationships with both staff and peers. Humor can make the learning environment more comfortable and engaging for students encouraging their academic and behavioral success (Lovorn & Holaway, 2015). The third strategy is using relevance. When students find personal relevance while learning it stimulates an optimal level of arousal (Jeffrey et al., 2014). Using inquiry is another way attention can be gained in blended learning (Keller, 2010). Capturing and maintaining attention in blended learning courses is offered in a variety of ways allowing the student to be engaged.

Inquiry arousal. Another way to appeal to the attention element of motivation is what Keller (2010) referred to as inquiry arousal. Keller defined inquiry arousal as stimulating curiosity by posing challenging questions or problems to be solved (para. 1). According to Sriarunrasmee, Suwannatthachote, and Dachakupt (2015), learners have many learning approaches to gather various forms of information, which is important for collecting their own meaningful knowledge. Like researchers that have discussed stimulation strategies, Sriarunrasmee et al. (2015) found that students have to search, seek, explore, and research with all means to understand and perceive knowledge with meaning and enjoyment. Inquiry arousal is another way to stimulate student attention and give students additional opportunities to learn.

Another important way to employ inquiry arousal and keep the attention of students is to provide variability and consistency. Keller (2010) stated that variability is used to better reinforce materials and account for individual differences in learning styles.

Learner variability is part of every student, and teachers need to figure out how to meet the needs of each learners (Pape, 2018). There has been a concern around how to engage a student and get their attention while taking blended learning courses, and it is equally important to focus on how to help students maintain their attention and complete their course; this can be accomplished using variability and consistency. First, it is important to provide students with variability for how they learn content in both the F2F and online setting of a blended course. Consistency also helps students maintain attention. In a study conducted at a college university, researchers found that consistently using technology devices helped enhance student experience and maintain their interest in the course (Dwaik, Jweiless, & Shrouf, 2016). According to Jeffrey et al. (2014), there are four strategies that can be used to maintain student engagement: have clear content structure for course objectives, clear guidelines and instructions for students, challenging tasks that ignite excitement and feedback that students can learn and gain understanding. With each of these strategies present during blended learning courses students have a greater opportunity to be successful. The findings from Jeffrey et al.'s (2014) study suggested that once a student's attention is gained in a blended learning course, keeping it and making sure that all stakeholders are a part of the decision-making process are important. As more educational institutions add the blended learning model, it will be important that teachers are trained with the most current strategies and tools available to not only capture students' attention but also maintain it throughout the course.

Relevance

Relevance plays a key role in how students perceive the importance of a course they are taking. According to Keller (2010), a learning environment must establish relevance to motivate students, and instructors are encouraged to use language, analogies, or stories to which the learner can relate. In blended learning courses, students become self-directed learners through a student-centered curriculum that provides personalization and voice in choice in how they learn, what they learn, and where they learn (Powell, Roberts, & Patrick, 2015). Relevance is linked to the following categories: familiarity, goal orientation, and motive matching (Keller, 2010).

Familiarity. Keller (2010) defines familiarity as it relates to a learner's experiences and values. He connects these experiences and values with how they are able to adapt to instruction, use concrete instruction, and use examples and concepts to help with material being learned in a course (Keller, 2010). Relevance and familiarity connect the learner in blended learning by answering *how* information is taught. One way to ensure relevance for students when teaching blended learning courses is the ability to link the material being taught to their previous experiences (Keller, 2010). When a student is able to link previous knowledge with new information, there is an opportunity for increased motivation and student success. According to Keller (2010) learners should be allowed to establish connections with the material they are learning and previous experiences they have already had. This strategy gives learners a sense of continuity and has been successful in motivating students with wanting to learn. In a study on prior knowledge and brain activation and connectivity, Liu et al. (2017) reported that there

were benefits when acquiring new information and the connection it had to information that students already had. Although not a blended research study, researchers studied elementary students and the effects of prior knowledge on learning from different compositions in a mobile learning environment and found that students with prior knowledge received higher grades on course test (Liu, Lin, & Paas, 2014). With the growth of blended learning in educational institutions, familiarity is important and valued with the learners experience in a blended learning course.

Goal orientation. Keller (2010) defined goal orientation as providing statements or examples that present the objectives and utility of the instruction and the presentation of either goals to accomplish or having the learners define them themselves. Keller (1987) also provided a deeper definition, stating the importance of goal orientation to identify and set goals, allow students to select or identify goals, give examples of goals, and explicitly state or show the value of goals.

Another element of goal orientation is providing the student with choice. Student choice gives students the opportunity to decide what course or path will be best to achieve blended learning course goals (Maseleno et al., 2018). One way to give students choices is to allow them to choose the modality of the course they take: fully online, fully F2F, or blended. Keller (2010) explained that learners know exactly what they want to learn and how and giving them the choice to achieve their goals is another factor that increases motivation. Blended learning is flexible when it comes to time and place, allowing students the luxury of deciding what suits them best (Arkorful & Abaidoo, 2015). Having the choice to decide when, where, and how a course can be completed is a

major motivation factor for students. In a study with Michigan students, researchers offered different blended learning courses and found that providing students with the flexibility to work at their own pace and a choice in which pathway to take to demonstrate mastery of their learning, increased their engagement and facilitated a deeper level of their understanding of the content (Powell, Roberts, & Patrick, 2015). However, student choice can also refer to choices students make related to curriculum options within a single modality of learning. According to Pierce (2017), blended learning can look different from one classroom to the next but effective blended learning courses share the same characteristics—engaged teacher, strong classroom culture, and clear purpose to every learning experience. Blended learning offers a variety of ways that students can use choices that align with their course goals to decide what and how they learn and achieve course goals.

Motive matching. According to Keller (2010), relevance related to motive matching is being able to adapt by using teaching strategies that match the motive profiles of the students within the blended learning course. The motive matching strategy involves needs matching where the educator evaluates the learner and determines the best way for the learner to learn based on achievement purposes (Afip, 2014). In a study focused on motivating adult learners using blended learning courses, Afip (2014) used motive matching to allow students to choose a health promotion and maintenance problem that they felt passionate about and had them prepare a report in which they developed a mechanism to assist with the problem (p. 37). According to Keller (2010), students take eLearning courses when it is required in order for them to gain knowledge

or skills in their current life, and they are motivated if they see a direct connection between how the course will equip them with new skills that will help them in their current life. Relevance and motive matching offers students the appropriate learning strategies, which in turn gives them more opportunities to connect what they are learning with their current life increasing their motivation to learn.

Confidence

According to Keller (2010), confidence is one of the four factors that contribute to student motivation. Students have to feel confident that they will achieve their blended learning course goals or they lose motivation. In order to have a student that possesses all the qualities of confidence, they must be able to scaffold success of meaningful tasks in three ways: learning requirements, success opportunities and personal control (Keller, 2010).

Learning requirements. The first way to ensure a student's confidence is to facilitate growth and communication. Keller (2010) suggests setting clear learning requirements, which include clear goals, standards, requirements and evaluative criteria. Keller (2010) described facilitated growth and communication as encouraging learners to take small steps and immediately showing them their progress in the learning course will motivate them to believe in themselves. Having students set small goals to meet learning requirements and using rewards systems to celebrate achievement increases student motivation (Filsecker & Hickey, 2014). Internet efficacy is reflected in the confidence students show in performing Internet-related tasks (Kuo, Walker, Belland, Schroder, & Kuo, 2014). This confidence is important for online learners who need to proceed and

meet specific goals so they can learn successfully (Kuo et al., 2014). Confidence in

blended learning contributes to the success that a student has while taking courses. In a

qualitative study conducted by Zhang and Han (2012), results showed that when

comparing traditional and blended learning, students felt that blended learning increased

their self-confidence, fostered their learning, and improved their ability to engage in

collaboration and communication with their peers. For example, Kuo et al.'s study

showed the importance of clear learning requirements when student explained they were

confidence while taking blended learning courses and the results described that students

had higher confidence when gathering data or getting support through the Internet for the

course and less confidence in resolving actual Internet problems. Studies on student

confidence in blended learning have been ongoing for decades. Holley and Oliver (2010)

stated that for blended learning to be effective students must (a) experience a sense of

confidence, (b) be able to choose familiar ground, (c) be prepared and open to work with

others in an environment that is both safe and supported. Student confidence can be

increased while taking blended learning courses when there is a facilitation of growth and

communication.

A connection exists between student confidence as it relates to growth and

communication and the teachers who teach those blended courses. Student confidence in

teachers/facilitators of blended learning course is extremely important. In a study

conducted on university students in an allied health, course researchers found that

students with previous high school course experience and building relationships increased

their confidence and the quality of their learning in the course (Page, Meehan-Andrews,

Weerakkody, Hughes, & Rathner, 2017). Teachers are an integral part of blended learning and building confidence in students, their perspectives were included in the design of this study.

   Success opportunities. Every student desires the opportunity for success. Keller (2010) defines opportunities for creating success by giving meaningful and challenging ways within available time, resources and effort. Keller (2010) makes a deeper connection by saying that learners need to be aware of performance requirements and evaluate criteria. This type of success can be measured through feedback and communication. Feedback and communication are two key factors that contribute to student confidence. Keller (2010) suggested that feedback is crucial in order for learners thrive in and be successful in eLearning courses. Feedback in blended learning courses allows the opportunity for less confusion, relationship building with teachers and peers, and the ability for students to have success academically. According to Futch et al. (2016), it is important to provide an atmosphere of feedback where students feel safe and comfortable. This study was conducted to look at different types of feedback and determine what student preferred most. Data from student interviews showed that they valued F2F feedback and the one on one interaction with teachers while others enjoyed the discussion feedback and the online interaction with peers as well as teachers. A literature review done by Boelens et al. (2017), focused on communication, the challenges of blended learning, and the importance of facilitating interaction. The review highlighted that F2F components brought learners together and enabled both verbal and non-verbal communication during certain parts of the course and learners do not want to

lose the social interaction and F2F connection from instructors (Boelens et al., 2017). Another literature review of undergraduate students, age ranging from 16-24, reported the importance of two way communication and flexibility in blended learning environments (McDonald, 2014). Varied types of feedback have shown to be important in building student confidence and increasing success opportunity in blended courses.

   Personal control. Personal control is described by Keller (2010) as showing or explaining how the student's own effort determines success, looking at how personal responsibility connects directly to achievement. Keller (2010) also described that providing learners with some degree of control over the learning process gives them a sense of independence and control over their own success, which motivates them to commit to the eLearning course. Students involved in blended learning courses may experience control by determining the order in which tasks and curriculum content are completed (Van Laer & Elen, 2016) and paced, by progressing at their own speed when studying the material (Staker & Horn, 2012). In one study Owston et al. (2013), discussed control in terms of giving students options, much like choice, but different because of immediate control, while taking F2F or blended learning courses. These student choice options included working at their own pace and their place of choice. The use of blended learning may allow for more options related to pacing, where each student has control and can study at slow or quick speeds (Arkorful & Abaidoo, 2015). Students appreciate flexibility to work at their own pace because it gives them a sense of responsibility and control over their own learning processes. An important way to build confidence is to build into courses, an element of student control.

Satisfaction

Satisfaction is an essential characteristic for a learner to experience if they are to have a positive learning experience that leads to a continued motivation to learn. Keller (2010), felt learners should be proud and satisfied from what they have achieved and learned in an eLearning course. Stukalina (2012) adds that student motivation is defined as a student's positive emotional experience in education as the result of students' interactions with the educational environment. Understanding satisfaction through different researchers views and how it is linked to motivation is critical for students and instructors while taking blended courses.

There are many characteristics of a satisfied learner. Survey data were collected from college students and showed that students were satisfied because the course allowed them to be engaged, motivated and responsive, contribute to an effective learning climate, and achieve at higher levels (Dziuban et al., 2015). In a qualitative study done by Shantakumari and Sajith (2015) to measure student satisfaction while taking blended learning courses, the results indicated that 54% would take another course because of the effectiveness of the instruction. With more attention being focused on satisfying learners while taking blended learning courses, the opportunity to increase motivation in learners is also important.

The literature showed that there is a direct correlation between student satisfaction and motivation in blended learning courses. Kirmizi (2015) found that high satisfaction leads to higher levels of retention, higher persistence in learning, and higher motivation. A study examining the relationship of satisfaction in blended learning courses to various

aspects of learning found that motivation and student communication working together simultaneously increase learning outcomes (Kintu & Zhu, 2016). Also according to Vasileva-Stojanovska, Malinovski, Vasileva, Jovevski, and Trajkovik (2015) motivation is treated as a factor influencing the overall satisfaction of a student's learning experience. As researchers continue exploring satisfaction and the connection linked with motivation, more characteristics for learners to have positive experiences while taking blended learning courses can be developed.

There are many influential factors that satisfaction has on the outcome for students taking blended learning courses. According to Chen and Yao (2016) determining the degree of a learner's satisfaction with blended learning is important when evaluating the effectiveness of the course and developing strategies that benefit the learner. Chen and Yao (2016) identified thirteen factors that influence student satisfaction when enrolled in blended learning courses. These factors are as follows: learner attitude towards computers, learner computer and internet self-efficacy, instructor response timeliness and attitude towards blended learning, blended learning course flexibility and quality, technology and internet quality, perceived usefulness and ease of use, diversity in assessment and learner perceived interaction with peers (Chen & Yao, 2016). In another study conducted by Martínez-Caro and Campuzano-Bolarín (2011), factors that influenced satisfaction in traditional and blended learning courses were class attendance, access to teacher, collaboration with peers and motivation. When students are present in class, they have access to the teacher, there are more opportunities to collaborate with peers and student motivation increases. It is equally important to identify reasons why

students are dissatisfied while taking blended learning courses. Keller (2010) identified

three basic strategies for enhancing satisfaction: natural consequences, positive

consequences and equity. Research has identified intrinsic reinforcement and extrinsic

rewards as two factors influence student satisfaction in blended learning courses and

increase motivation.

Intrinsic reinforcement. The intrinsically motivated student has a personal

interest in learning and is not motivated by a grade or reward. According to Keller,

(2010) intrinsic motivation is where learners have fun through the learning process

without expecting reward. Through intrinsic motivation learners can be stimulated by

incorporating challenge, curiosity, learner control and fantasy in activities (Reynolds et

al., 2017). Intrinsic motivation has been linked to creativity of performance, longer-

lasting learning and perseverance (Hennessey, Moran, Altringer, & Amabile, 2015).

Feelings of self-determination, control and satisfaction have also been linked to an

intrinsically motivated state (Hennessey et al., 2015). Intrinsically motivated students

find activities enjoyable, exciting and like challenges. In order to increase intrinsic

motivation within a class, instructors must have lessons/activities that capture creativity,

curiosity and enthusiasm.

Student's value immediate application and connection to real world problems

while take blended learning courses. According to Keller (2010), learners should feel as

though the skills or materials that they are mastering will be useful in the future and have

the opportunity to practice newly acquired skills in real world settings or real problem-

solving activities. In a skills trade study, examining a flipped classroom, Nederveld and

Berge (2015), studied learners who watched recorded lessons and then applied their newly learned skills in a live classroom session with their peers. Results from the study revealed, the benefits of a flipped classroom allowed students the ability to work at their own pace and gave instructors the time to work with more students on mastering different skills. When students have the opportunity to immediately apply acquired skills to real world situations, they find more value and satisfaction for the course.

Extrinsic rewards. Extrinsic motivators are used when students pursue things such as, recognition for obtaining a high score (Keller, 2010). Keller (2010) learned that when these types of motivators are used in instruction some may feel a loss of control and therefore, experience dissatisfaction in their learning experience. Extrinsic motivation is the motivation to do something in order to attain some external goal like a trophy, medal or certificate. Extrinsically motivated students need the end goal to be some form of a reward that shows achievement or completion of work or an activity.

Research has shown a connection between praise and reward with student satisfaction and motivation. According to Keller (2010), the learning process must present learners with some kind of reward, either a sense of accomplishment or praise from the instructor. In one study Vijayan, Chakravarthi, and Philips (2016), discovered that praise is often satisfying to students and as a result positively affects their work; therefore, proving that praise and positive reinforcement is important. Tan and Hew (2016) found that meaningful gamification usage in blended learning environments generated a more positive student attitude toward the course. Finding different ways to

reward students with praise and feedback is important to their overall success in a blended learning course and will increase their satisfaction and motivation.

Equity. The third strategy for enhancing student satisfaction is equity. Keller defined equity as maintaining constant standards and consequences for task accomplishment (Keller, 2010). With the broad ranges of approaches that are used with blended learning equity is important. Equity is about the achievement of fairness in education, and in meeting the specific needs of specific students (Rose, 2014). In an article written about access and equity for all learners in blended and online education, it was suggested all school employees have a good understanding of the online programs and also understand their responsibilities on providing advice and guidance. If students feel that opportunities and standards are fair and consistent in their blended learning courses, it can positively impact motivation and student satisfaction.

A summary of the literature on student motivation shows that motivation in a blended learning environment is challenging. In my review of the literature, I discussed student motivation in blended learning as it relates to Keller's ARCS model of motivation focusing on attention, relevance, confidence and satisfaction. According to Keller (2010), attention can be obtained either by perceptual arousal (Jeffrey et al., 2014) or by inquiry arousal (Sriarunrasmee et al., 2015). Relevance in blended learning is a key role in how students perceive why the course is important and is linked through the following categories: familiarity (Liu et al., 2017); goal orientation (Maseleno et al., 2018); and motive matching (Afip, 2014). Students have to feel confident that they will achieve their blended learning course goals or they lose motivation. According to Keller's (2010)

students need to scaffold success of meaningful tasks in three ways: learning requirements (Filsecker & Hickey, 2014), success opportunities (Futch et al., 2016) and personal control (Van Laer & Elen, 2016). Data from study results in the last five years indicate that students are looking for different forms of satisfaction to increase their motivation while taking blended learning courses. According to Stukalina (2012), students are satisfied and motivation increases when their learning experience and expectations includes a variety of interaction. Researchers also suggested that intrinsic reinforcement and extrinsic rewards are good tools used to increase student satisfaction, motivation and academic success (Tan & Hew, 2016). Research also suggested the importance of equity in blended learning courses and the belief that students appreciate fairness for all to have the opportunity to learn (Rose, 2014). What is known is all of these characteristics contribute to student's satisfaction and have the potential to increase motivation. The gap that still remains is understanding what factors contribute to the motivation of students while taking blended learning courses, particularly with high school at-risk students. This gap is important because there is direct correlation between student satisfaction and student motivation. While some studies explored measuring satisfaction and its importance in educational institutions (Abbas, 2018), and characteristics of satisfied learners (Eagleton, 2017), this study explored the attention, relevance, confidence, and satisfaction motivational factors of online high school CR courses. My study expanded on current research about student motivation in blended learning, added understanding to the motivational factors that high school students need to be successful in blended learning courses and be used as a problem-solving approach

that focused on the whole student addressing their attention, relevance, confidence and satisfaction needs.

Teacher Perceptions

When it comes to creating a learning environment that enhances and sustains the motivation and engagement of students, teachers are a key factor (Hornstra et al., 2015). The thoughts and ideas that teachers perceive are used to help increase motivation, improve student engagement and find additional strategies to help students be successful. Teacher's beliefs are developed through their own experiences as learners, their initial teacher training, and their professional experiences as teachers (Hornstra et al., 2015). Research has shown that teacher perceptions impact expectations and student overall achievement, and therefore are important to study when examining student motivation (Beavers, 2014). In the following review of the literature, I discussed teacher perception as it relates to at-risk students, motivation, CR courses and blended learning.

Teacher Perceptions of At-Risk Students

Teacher perceptions of at-risk students are crucial in how teachers provide support and what strategies they offer to help increase motivation. Positive teacher perceptions about at-risk students are important for students to develop self-esteem in their personal and academic lives (Gehlbach et al., 2016). There are many factors that make up a teacher's perception about at-risk students, but the factors all have to do with the relationship between teacher and student. Teacher beliefs surrounding how they perceive at-risk students and how to build relationships factor into how well these students do in blended learning courses. In a qualitative study exploring and

understanding experiences of teachers that had successfully dealt with at-risk students,

showed developing and maintaining positive relationships as fundamental for the

teaching process (Bourne, Crossfield, & Nicholas, 2017). Like the previous study, Scales,

Pekel, Sethi, Chamberlain, and Van Boekel (2020), discovered that middle school

teachers perceived forming healthy relationships and showing respect with at-risk middle

school students as important. In interviews, teachers shared that when students feel

valued and respected they are more willing to learn (Scales et al., 2020). Although some

studies have linked positive attributes of student-teacher relationships to motivation,

researchers Timmermans, de Boer and van der Werf (2016) indicated that contrary to

their expectations, they did not find a correlation between academic performance and

relationships. Teacher perceptions and beliefs about the importance of relationships are

key to supporting at-risk students and helping motivate while taking blended learning

courses.

Although teacher perceptions of at-risk students can produce long-lasting and

powerful effects on academic achievement (Blazar & Kraft, 2017) not all of perceptions

are positive. Teachers' beliefs about at-risk students vary from over compassionate to

neglect. In a study aimed to review teacher aptitude beliefs as a predictor of helplessness

in low achieving students results suggested teachers who attributed student failure to lack

of aptitude were likely to offer help, compassion, less punishment, and anger than those

who attributed the lack of achievement to no effort (Heyder & Brunner, 2018). Teachers

also perceive that they have a lack of support and preparation when working with at-risk

students. In a quantitative study focused on the perceived needs of teachers of k-12

students working with at-risk students, to best support students become successful teachers the results revealed teachers demonstrated interest in professional development that covers the following strategies: in class behavior, student motivation, supporting mental health, student critical thinking, student engagement, student behaviors, differentiation, varying grade level readiness, and students with special needs (Heyder & Brunner, 2018). Research on teacher behavior towards low performing students has shown that how teachers respond with anger, show empathy or they give up on helping the student (Jager & Denessen, 2015). Jager and Denessen (2015) conducted a teacher research with 64 secondary teachers to understand their variations of behaviors towards different low achieving students finding teachers predominately use student related casual attributions to account for their students achievements (Jager & Denessen, 2015). Timmermans et al. (2016) investigated the relationship between teacher expectations and teacher perceptions of student attributes in a qualitative study described teachers had higher expectations for a student if they perceived the student as self-confident, and having positive work habits. Not all teacher perceptions of students are positive but with professional development and trainings to focus on useful strategies to better support at-risk students this can change.

Teachers perceive relationships, as paramount in supporting at-risk adolescence and many feel that intensive structured planning and training is needed for optimal success. Studies show the importance of teachers and students building strong, positive relationships in their overall motivation to achieve academic success (Spilt & Hughes, 2015). Students have increased motivation and academic success when there is a positive

relationship with teachers. Students want to feel a sense of respect, love and acceptance by their teachers (Gizir, 2019). A study exploring leveraging similarity to improve teacher student relationships and academic achievement suggested teachers perceive better relationships with students who shared similarities such as more positive teacher to student relationships and students that had relationships with teachers would earn higher grades (Gehlbach et al., 2016). Teacher relationships are not always positive. One study conducted with at-risk African-American elementary students and conflicts with teachers showed students with below average literacy skills were at-risk of increasingly conflict relationships with their teachers (Spilt & Hughes, 2015). To improve student teacher relationships, research found positive effects of professional development interventions offering a combination of courses and providing teachers with instructional support (Spilt & Hughes, 2015), helping to improve teacher perceptions of at-risk students. The student-teacher relationship is important for students to feel value and respect. Strategies and programs should be in place to help promote student-teacher relationship building, which will increase student motivation and academic success grows.

Teachers' Perception of Motivation

Teachers are an important component for increasing student motivation. Teachers consider motivation to be an important part of the teaching and learning experience (D'Elisa, 2015). In reviewing the literature on how teachers perceive motivation, several themes became evident. I discuss the literature about teacher perception of student motivation by the themes revealed—role of teacher, time management and student effort and will be reviewed. Each of these themes, according to teacher perception, are

connected to Keller's ARCS model of motivation: Are students satisfied with the role of the teacher? Are students confident with time management and the flexibility? Do students feel comfortable using the technology? One important perception teachers have is the belief that each student has the ability to be motivated intrinsically or extrinsically. Intrinsic motivation is related to internal energy that supports the interest of learning and extrinsic motivation is related to external factors that stimulate learners (Keller, 2010).

One common perception of student motivation that teachers have is their own effect on student motivation related to their role as teachers in blended learning. According to Koca (2016), teacher relationships, in their roles as mentors, affect student motivation to learn. The literature suggests that teachers believe their role shifts in blended learning from teacher-centered to student-centered allowing teachers to facilitate the learning process (Patrick, Kennedy, & Powell, 2013). This new role of teacher is positive attitude and willingness to work with the student can make the student feel encouraged and increase motivation to work. In a literature review, teachers suggested that the impact of their role to provide several motivational strategies made positive results on students learning achievements (Dja'far, Cahyono, & Bashtomi, 2016). Those strategies include--bringing humor to the classroom, showing students care and establishing relationships (Dja'far et al., 2016, p. 31). In a mixed study high school teachers responded to open-ended questions on a questionnaire that the motivation of students is changeable under their influences and behaviors (Hardré & Hennessey, 2013). In a similar study focusing on teacher's motivational strategies, Hornstra et al. (2015) found that they are the key to shaping a learning environment that promotes and sustains

student motivation and engagement. Results also showed that teachers find it beneficial to more closely control the motivational strategies they use with the students they believe are more at-risk (Hornstra et al., 2015). These influences and behaviors that teachers feel they can impact include interest, engagement and effort. Effective teachers know that is not only their job to support and facilitate students academically but to also provide environments for positive attitudes that increase student motivation.

A second common theme of motivation that teachers perceive to have a positive effect on student on motivation is time management. Time management is defined as the management of time based on the requirements of work and other activities put on individuals (Sahito, Khawaja, Panhwar, Siddiqui, & Saeed, 2016). A blended learning study focused on time spent and workload, faculty perceived the blended learning environment provided more convenience and was attractive to students because it allowed for flexibility to work at their own pace (Phillips, Schumacher, & Arif, 2016). Teachers understand the value that time has in relationship to student success. Using time management along with creating goals to complete assignments are strategies that can assist with student motivation while taking online courses.

Student effort is the third theme related to motivation that teachers feel lead to increased motivation in a blended learning course. Teachers are more likely to invest in motivating students if they view motivation as a malleable characteristic they can effectively change (Hardré & Hennessey, 2013). In a study done on the role of effort regulation of virtual high school students in mathematics course, participants were

surveyed three times over a semester to measure their motivation and determine the impact it had on their overall engagement during the course.

Teacher Perceptions of Blended Learning and Student Success

Teacher perceptions exist in blended learning and contribute to the beliefs teachers have about their student success while taking blended learning courses. Although there is limited literature Koca (2016) indicated teacher perceptions influence the children they teach. In blended learning courses teachers need confidence in using course technology, a variety of communication tools and collaboration strategies that increase motivation and success in student achievement. In a review of the literature, I organized teacher perception of blended learning into discussions related to technology use, communication, and collaboration.

One common teacher perception regarding blended learning and student success was increased student engagement because of the technology involved. Research shows that when implementing the use of technology in the classroom not only is student's motivation, engagement, and self-confidence increased, their organizational and study skills are improved (Carver, 2016). In a qualitative case study exploring teacher perceptions of blended learning Sawang, O'Connor, and Ali (2017) found that teachers felt student engagement was increased with the use of technology. Another study on the effects of blended learning on middle school students, teachers indicated that teaching with technology directly impacts student achievement (Sarıtepeci & Çakır, 2015). Teachers have also indicated their struggles with using technology and the need for professional development. Larsen (2012) explored teacher and student perspectives on

blended learning in an English writing course. Results from this study showed that teachers found training on blended learning beneficial because it supported them with reasons for implementing this method of instruction in their classrooms (Larson, 2012). Teacher perceptions of course technology is important, it impacts student engagement, motivation and their student attitude while taking blended learning courses.

The second common teacher perception about blended learning and success is the increased opportunity for student communication where teachers can have F2F conversation, email chat, online group discussions and increased feedback. Teachers seek ways to increase communication both between teacher-student and between student-student. Student-student and teacher-student are one of most important factors that increase student learning and motivation (Gecer, 2013). Today there are many technologies (iPads, cellphones, kahoots) that allow for communication through social networks, blogs and podcasts (DePietro, 2012) that if used in blended learning can allow more engaging opportunities for learning. Communication is also a required skill for future endeavors such as college and careers (Darling-Hammond, Wilhoit, & Pittenger, 2014a). In a qualitative study exploring teacher perceptions, teachers felt a benefit of the blended learning approach was communication, as it increased motivation and was positively viewed by the students (Gecer, 2013). Communication is an important factor for increasing motivation and success in the blended learning environment and allows teachers to have different was to communication with students.

The third common teacher perception about blended learning and success is the increase in student collaboration. Collaboration is an educational mode that creates

opportunities for groupwork, communication and increases student motivation. Delialioglu (2012) conducted a study to investigate how blended learning of different instructional approaches with technology affects student engagement and found that technology tools in blended courses improved student collaboration with each other if used together to complete course assignments. Downing, Spears, and Holtz (2014) conducted a study transforming a university traditional course to blended learning for student engagement and teachers suggested that collaboration increased in blended courses if the course included critical thinking and solving real-world problems. Collaboration is a strategy that teachers perceive as important for students because it allows student to work together, communicate to resolve a problem and gives another opportunity to be successful in blended learning courses.

Teacher perceptions influence the teaching and interactions with students in a variety of ways. In my review of the literature, I discussed teacher perceptions related to at-risk students, teacher perceptions of student motivation, teacher perceptions of CR, and blended learning and student success. In relation to at-risk students after exploring and understanding experiences of teachers that had successfully dealt with at-risk students, interviews showed developing and maintaining positive relationships as fundamental for the teaching process (Bourne et al., 2017). Second, research related to teacher perceptions of student motivation show that motivation is an important component to the student learning experience and the way a teacher teaches a course (D'Elisa, 2015). Teacher perceptions of at-risk students, whether the perceptions are positive or negative (McGrath & Van Bergen, 2015), influence student success, but further understanding of teacher

perceptions of at-risk students taking blended CR is still needed. There is little research on high school teacher perceptions of blended CR courses. What is known is teachers determine the climate of the environment whether it's in the online component, building relationships or communication and collaboration within the course (Huber, 2014). A study revealed that teachers also believe that students value control and choice and work better when they have options (Pettyjohn & LaFrance, 2014). Although teacher perceptions of blended learning have been studied to show the influence it has on the students they teach (Blaine, 2019) and how important relationships are to student motivation (Mosley, Broyles, & Kaufman, 2020), little is understood about blended learning with at-risk high school students. The literature review also revealed three common themes of blended learning and student success that teachers perceived increased: engagement when technology is involved, communication and student collaboration (Carver, 2016; Downing et al., 2014; Harvey et al., 2014). These gaps are important because of the role that teachers have in motivating and gearing students for success. This study expanded on current research exploring teacher perceptions on blended learning course design, to better understand the support and training needed to support teachers in their interactions with at-risk students related to blended learning and motivation. The qualitative focus of this study added understanding to the gap by exploring motivational factors that influence student's attention, relevance, confidence and satisfaction while taking blended learning high school courses for CR.

Effective Design and Pedagogy in Blended Courses

Effective design and pedagogy in blended learning is important for increasing

student success throughout the course. Instructional design is described as setting the curriculum, designing methods, and establishing time parameters (Redmond, 2014, p. 1052). In this section of the literature review I discussed design and pedagogy elements shown to be effective for blended courses. I reviewed the literature to evaluate what research reports as best instructional practices for the online component of blended courses. I also reviewed best pedagogical practices for how teachers should use the F2F component in blended courses.

Instructional Design of Online Component of Blended Courses

Modern technologies have resulted in a new paradigm when it comes to teaching and learning (S. J. Chen, 2014). Instructional Design is the development of an education and training programs that allow the principles of teaching and learning to be applied in multiple instructional systems (Hnida, Idrissi, & Bennani, 2018; Keller, 2008). In the instructional design of the online component of the blended learning course, it is important for instructors to determine how that online space be best used. The design of the blended learning environments will only be improved if they are monitored by key challenges: flexibility, stimulating interaction, facilitating students learning and fostering an effective learning environment (Boelens et al., 2017). The literature shows that online learning space should offer flexibility, encourage social interaction and facilitate/monitor the learning processes offering students the best opportunity to be successful.

Flexibility. Flexibility in the online component of blended learning gives the student some level of control over time, place, path or pace of their learning (Staker & Horn, 2012). Although flexibility has been seen as a positive characteristic in blended

learning, there are also challenges. Research has shown that providing a flexible environment that includes a variety of learning modes, and opportunities for students to choose where and when they learn has challenges (Boelens et al., 2017). This flexibility allows students to submit assignments outside of the traditional F2F class times (Lotrecchiano, McDonald, Lyons, Long, & Zajicek-Farber, 2013). In their qualitative study Boelens et al. (2017) found that although blended learning provided students with flexibility in when and where work was completed, there were still set deadlines for assignments. Although there are benefits associated with the flexibility offered in blended learning courses, the challenges are just as important to research and offer new opportunities to help students be successful in these courses.

Social interaction. Another challenge associated in the blended learning environment is facilitating the social interaction with students and teachers in the online component of blended courses. Social presence is one of the most important components in the development of the online learning experience for a blended learning course (Horzum, 2015). Sung and Mayer (2012) defined social presence as the interaction and interpersonal relationships that are found in online spaces and the individual perception that one receives through the immediate and personal response within the group. Although social presence is seen as a vital element to influence online interactions, when the level of social interaction is low interaction is low (Vaughan, 2014). Learners from previous research have stated the importance of two-way communication between themselves and their instructors in the online learning component of blended learning (McDonald, 2014). Social interaction in blended learning courses is a crucial component

that allows the student opportunities to communicate with peers and staff while taking the course.

One design element of the online portion of a blended learning course is the use of the interactive space, for online discussions. Asynchronous discussion has been common tool embedded into online courses in order to encourage student-to student interaction as well as student-instructor interaction (Riggs & Linder, 2016). Research showed that instructors developing the asynchronous discussions for their blended courses need to consider all student learning styles and the design should be pedagogical in developing students intentionally for the adoption of strategies leading to a deeper learning (Johnson et al., 2017). Interactive spaces, specifically discussions, encourage student interaction with peers and allow for a deeper learning experience.

Research findings emphasize the importance of the online learning component in blended learning and show that there must be a balance in the course structure and dialogue (Horzum, 2015). Results from a quantitative study on the relationship among the online learning satisfaction, social presence, and structure showed that students receive the most satisfaction when they have a high social presence in their online learning (Horzum, 2015). Halverson et al. (2014) found that when provided with opportunities to collaborate and communicate with others, their engagement is increased. Increasing and maintaining student engagement is important and highly desired by teachers and institutions (Kahu, 2013). Student engagement is an ongoing concern for educators when designing interactive spaces for online learning because of its positive association with deep learning and educational outcomes (Northey, Bucic, Chylinski, & Govind, 2015).

Results of a quasi-experimental study investigating the impact of asynchronous learning interactions on the engagement and academic outcomes of students showed that they were more actively engaged and achieved better grades than those without that component (Northey et al., 2015).

Facilitating/monitoring learning processes. The learning process for blended learning is complex because of the F2F and the online component. Therefore, it is important to monitor learning and progress so that students have the opportunity to be successful in the online component of a blended learning course (Boelens et al., 2017). In a study conducted to establish best strategies that would be most helpful with monitoring students during the online learning process, it was determined that there are four strategies: orientating and planning, monitoring, adjusting and evaluating (Boelens et al., 2017). These four strategies have been used in other areas of education and have also shown benefits to completing projects (Boelens et al., 2017). In a study conducted on student engagement and blended learning, making the assessment connection, Vaughan (2014) stresses that optimal flow is achieved by creating learning environments that focus on purpose, passion, and play (the 3P's of engagement). The learning process for blending learning courses offers a variety ways for students to be successful if teachers monitor their progress it properly.

Effective learning management system. The learning environment is crucial to the learner, and in the case of blended learning, the learning management system, or LMS, must contain a variety of tools for student use and the learning materials needed to learn. The concept of an LMS has been used as a virtual learning environment (Keller,

2008). Effective LMS allow reliable and centralized learning and improve performance of overall educational activities. In particular, the course development and the associated processes (Byungura, 2015). In this learning model form, a virtual space for interactions between learners and instructors ranges from videos, chat rooms, emails, and links to electronic resources (Byungura, 2015).

Effective learning climates also mean that students have access to digital content (e. g. Videos, chat rooms, emails and electronic resources). The online portion of courses often hosts engaging ways for students to access learning materials, such as digital online resources they need to read (Politis, Tsalighopoulos, & Kyriafinis, 2017), videos they need to watch (Cargile & Harkness, 2015), interactive learning modules (Zacharis, 2015), asynchronous discussions (Chadha, 2018) and sometimes online recordings of the instructor giving direct instruction (Wang, Quek, & Hu, 2017). However, in a study designed to determine the best instructional recommendations for use of blended learning from the student perspective, students explained that online lectures took them much longer to complete then the duration of the audio, as students paused the lecture to take notes (Margolis, Porter, & Pitterle, 2017). Online homework is one digital component that students have access to in the online component of the blended learning course model. In a qualitative study, where students were surveyed, results showed that students had positive attitudes about online homework, with the large majority of the students viewing it favorably (80.2%), as worth the effort (83.5%), relevant (90.5%), challenging (83.4%), and chemically thought provoking (79.0%) (Richards-Babb, Drelick, Henry, & Robertson-Honecker, 2016). Most online learning has taken the typical classroom and

extended it to a new delivery allowing the learners to interact with learning materials, with or without the physical presence of peers and the instructor (Webb, 2012). The main reason for the continued interest in effective blended learning environments is that combinations of F2F and online teaching activities have been found to offer several new opportunities for optimizing learning (Spanjers et al., 2015). The climate and learning environment are important for creating positive attitudes and meaningful learning experience for students. Effective learning climates provide students with multiple opportunities to be engaged while taking a blended learning course.

Course organization is another important component in the instructional design of the online component of a blended course. There is evidence that utilizing a blended course design and organization impacts teaching and learning in different ways (Keengwe & Agamba, 2015). According to Gutierez (2015), content should be organized effectively to maximize learning opportunities. Gutierez (2015) believes the best way to design a course is to determine the objectives for the course, prepare the curriculum to meet the objectives, prepare assessments to determine how effective the information was presented and then reflect on the design and make adjustments. According to the Network (2018), the online portion of a flipped learning course instructional designs needs to be organized to answer the Why-Standards, Essential Questions, and outcomes; the How-Assessment/Capstone event; and the What-Lessons, day to day (Network, 2018). Kurihara (2016) found three strategies that help manage the in class learning environment and stay organized: create a system to organize the paperwork, develop ways to focus energy and use templates. Course organization is important when trying to design an

effective learning environment giving students every opportunity to stay motivated and be successful in the F2F component of the blended learning model.

Role of Face-to-Face in Credit Recovery Courses

Blended learning is a combination of the best practices of traditional learning with the advantages of online learning, giving students the personalized learning experience needed for them to be successful (Powell, Watson et al., 2015). This learning takes place online for a portion of the time and the rest of the time is spent with instructors –to maximize learning and create the best pathway for each student (Powell, Watson et al., 2015). The research shows a variety of best pedagogical practices for the F2F component of blended learning courses. F2F learning caters to students who need that more personal communication aspect in learning than is found in online learning environments (Kaur, 2013). The F2F component can be used for instruction, group work, or monitoring and tutoring students who need extra help.

Instruction. Kaur (2013) defines f2f learning as learning in a traditional setting where the teacher is then *lecturer* and the student is the *receiver*. Instruction in F2F plays a significant role in presenting student learning as teachers can design learning activities, providing direct instruction, and explain supplemental learning materials (Huang, 2016). In the blended learning environment the teacher's role is redefined and instruction can come in various ways. In one study that focused on teacher perspectives on F2F instruction in a blended learning course found the role shifting from communicator to designers of high quality learning for student experiences (Pierce, 2017). In blended learning courses students should be able to discover information and make meaning for

themselves, where learning is driven internally. In a study by researchers from Ready to Blend (Staker & Horn, 2012) focusing on great blended learning teachers and their delivery of instruction, two clusters of competencies of characteristics that teachers possess are: (a) be a great coach by providing students with individualized remediation and feedback; (b) help students hold themselves accountable by setting goals and tracking their progress. F2F instruction is an important component for learning and in the blending learning model it ensures the students have a form of verbal contact of instruction with the course instructor.

Group work. In the F2F component of blended learning, students have the opportunity to do group work and collaborate with peers in the course. The peer support that students receive during group work helps them to internalize both external knowledge and critical thinking skills, then provides them with the opportunity to use them to complete learning tasks (Nicolson & Uematsu, 2013). The literature suggested that the use of collaborative learning applications within the F2F component indicates a meaningful and worthwhile learning outcome where students are recognized and supported (Vaughan, 2014). In an article written about unpacking the research behind the strategy of group work in the classroom, it was suggested that even though there are challenges with group work is a great way to engage students because it allows students to partner on a particular assignment or task (Nicolson & Uematsu, 2013). As a result of group work, students' skills are improved and they learn the value of teamwork (Nicolson & Uematsu, 2013). In a mixed method study focusing on challenges for collaboration in blended learning researchers found that students needed to learn from experience,

specific and intensive instruction, practice, and development (Monteiro & Morrison, 2014). In blended learning the F2F component provides students with a collaboration piece that encourages group work; therefore, giving them the recognition, confidence and support they need.

Monitoring and tutoring. Many students need to be monitored on how they are progressing throughout a course and supported with tutoring throughout the blended learning course. According to (Krasnova & Demeshko, 2015) one major key in successful blended learning environments is the presence of a tutor. Within the blended learning course the teacher fulfills this role and supports the students in their individual learning path. In a study conducted on tutor mediated support in blended learning, it was found that to eliminate the feelings of isolation and to promote freedom, students must have the support of a tutor (Krasnova & Demeshko, 2015). The tutor can provide them four possible functions of support—pedagogical, social, managerial and technical (Krasnova & Demeshko, 2015). According to Singh, Sharma, Jokhan, and Lindley (2013) in order for learners to find success in online learning programs they need to include self-direct learning, time management systems, self-monitoring and reflection, and engagement with other learners. Monitoring student's progress while taking blending learning courses and offering support when they run into challenges is a key component to helping students achieve success while taking blended CR courses.

In my review of the literature related to the instructional design of online component of blended learning the themes that emerged were flexibility, social interaction, flexibility/monitoring the learning process, and effective learning climate.

With there being different variations of blended learning, it is important that the F2F

component focus on instruction, collaboration/group work and monitoring and tutoring in

order for the students to have a greater opportunity for success. One gap in the research is

that the primary focus is teacher perspectives and what they feel is important for students

to be successful while designing the courses (Pierce, 2017). Student perspectives about

how the F2F portion of the course is designed, what they need to be successful and what

motivates them needs to be further studied and incorporated into the design of a course.

Another gap is related to feedback. The Danielson framework for teaching, states that a

classroom with the most distinguished teachers provide high quality feedback from many

sources, including students and being specific and focused on student improvement

(Staker & Horn, 2012). These gaps are important to study because students value and

need feedback (Small & Attree, 2016) and their perspective is an important component

for success in a blended learning course. Continued research on best F2F practices and

design of blended learning courses, may provide increased understanding of how F2F and

blended portions should be developed together to best meet the needs of students. This is

particularly important when these courses are designed for at-risk students who already

have complicated motivational issues related to courses. It is not known what strategies

CR course instructors are using in F2F components of blended courses to help students

succeed. It is also not known how well CR courses are designed and whether or not the

online course design helps students better understand the content they are supposed to be

learning. This study added understanding to the gap by specifically exploring how

perceptions and course experiences influence at-risk student motivation in blended CR

courses.

Summary and Conclusions

In summary, this chapter included a review of research related to CR courses, student experiences and perceptions, student motivation, teacher perception and effective design and pedagogy in blended learning courses. An overview of the history of CR at the beginning of the chapter demonstrated that CR is one of the fastest growing areas of online education potentially having a major impact on helping students in high school meet graduation requirements. With the growth of online learning predicted to overall five million in K-12 institutions (Picciano et al., 2011), where seventy-five percent of U.S. school districts offer some form of online courses (Watson et al., 2013) the opportunity to offer students different options to meet graduation requirements is increasing. Research on CR courses have been done related to students' online (Powell, Watson et al., 2015) and F2F (Kaur, 2013) experiences, but little has been done on blended CR experiences (Poon, 2013). However, research did show that there are a number of benefits to students choosing to take it this way, including providing instructional environments that are self-paced (Pettyjohn & LaFrance, 2014), curriculum that is individualized (Staker & Horn, 2012) and the combination of both online and F2F instruction increasing the opportunity for students to master and complete courses (Powell, Watson et al., 2015). Alternatively, there are also some challenges as well, including, making sure that courses online were just as rigorous as the traditional F2F (Bawa, 2016), providing Internet access for all students even in rural communities (Miller & O'Brien, 2016), and the change of roles for the teacher from instructor to facilitator

(Greene & Hale, 2017). What is still not understood is the perspectives of at-risk students in these blended online CR courses, particularly related to motivational issues.

Studies showed that various elements of motivation are influenced by the structure of blended learning. Although much of the research done on motivation has been focused on attention, relevance, confidence and satisfaction teacher perspective is an important consideration. Teachers consider motivation to be an important component to the teaching and learning process (D'Elisa, 2015). Many themes were revealed about motivation in this literature review: (a) one common perception of student motivation that teachers have is their own effect on student motivation related to their role as teachers in blended learning, (b) is time management and (c) student effort. With motivation being an essential component to student engagement and success in blended learning courses, determining what motivates a student is important. Although there is much research on blended learning in universities (Phillips et al., 2016), little is understood about high school students, what motivates and engages them and how these factors contribute to the benefit and challenges of CR in a blended learning model.

Teacher perceptions are an important element to examine in courses taken by at-risk students. Research revealed that teachers often perceive at-risk students as needing support and intense structure in courses (Spilt & Hughes, 2015). Students want to feel a sense of respect, love and acceptance by their teachers (Froiland, Worrell, & Oh, 2019). Teachers felt that at-risk students found relationships important to their success because they feel valued and respected (Gehlbach et al., 2016). Teacher perceptions bring a huge value because they are the one constant in student's lives while they are taking these

courses. The gap that remains is a deeper understanding of teacher perceptions of at-risk high school students taking blended learning courses for CR. Data from my study may extend understanding of teacher perceptions and how they can be used to support student success.

Research, thus far, on CR has been limited to online CR (Oliver & Kellogg, 2015), and research on blended learning has been studied more on defining the different ways the courses can be designed. Research shows that the best use of F2F time in blended courses should include instruction (Huang, 2016), and group work (Vaughan, 2014). Best instructional design principles show that the best online component of courses should include effective communication (Kaur, 2013), differentiated instruction (Huang, 2016), and providing the students with course monitoring and tutoring (Krasnova & Demeshko, 2015). The gap still remains that little is understood about at-risk high school student motivational factors while taking blended learning courses and whether these motivational factors contribute to the successes or failures in these CR courses. In this study, I expanded on the role that motivational factors contribute to student's experiences while taking blended CR courses. Additionally, the data collected for my study on student experiences and teacher perceptions is a gap in the literature that has not yet been explored. More studies are needed to examine the quality of the high school students learning experience in the virtual environment, especially those of lower performing and at-risk students, in order to design appropriate supports as the particular population of students continues to grow within virtual schools (Lewis et al., 2014).

Chapter 3 included the research method that I used for this study. I described the research design and rationale and the role of the researcher. I also discussed the methodology as it relates to participants, instrumentation, data collection and the data analysis plan. In addition, I discussed ethical issues and trustworthiness of qualitative research.

Chapter 3: Research Method

Introduction

The purpose of this qualitative multiple case study was to explore teachers'

perceptions and students' experiences related to at-risk students' motivation in blended

learning CR courses. To fulfill this purpose, I used interviews, observations, and course

curriculum reviews to explore how students and teachers participating in blended

learning courses for CR report their overall experience. I also described the experiences

of students and perceptions of teachers regarding how an effective curriculum motivates

students taking blended CR courses.

In Chapter 3, I describe the methods and procedures used in this qualitative

multiple case study. I outline the research method, rationale, and design appropriateness.

Included in the chapter are the RQs and SQs, population, sampling frame, informed

consent, confidentiality, and geographical location. This chapter includes

instrumentation, data collection, data analysis, validity, and a chapter summary.

Research Design and Rationale

I used a multiple case study design. The RQ and related SQs were aligned with

the conceptual framework and the literature review for this study.

RQ: How do perceptions and course experiences influence at-risk student

motivation in online/blended CR courses?

SQ1: What are at-risk high school students' experiences related to motivation in

the online/blended CR course?

SQ2: How do CR high school teachers perceive at-risk student motivation in online/blended recovery courses?

SQ3: How does the instructional design of the online CR course influence the student motivational experience?

SQ4: How does the F2F component of online/blended CR courses influence the student motivational experience?

Rationale of Design Choice

The qualitative multiple case study approach was selected for this study because it provided the ability to collect rich, detailed data from the participants based on their experiences (see Merriam, 2009). Multiple case studies were defined by Yin (2014) as case studies that enable the researcher to explore differences within and between cases having a goal to replicate findings across cases. When drawing comparisons, it is imperative that cases be chosen carefully so that the researcher can predict similar results across cases or predict contrasting results based on a theory (Yin, 2014). The multiple case study design is advantageous for many reasons. First, case studies can be used to predict similar results and to predict different results for predictable reasons. A single case study was not chosen for this study because I wanted to cross-analyze high schools and explore the motivational factors of students in high school blended learning courses for CR. For this study, I looked at two different high schools that offered blended learning courses for CR. I examined the findings between course curriculums, teacher and student perspectives, and observations of the classroom environments. Second, when case studies are reviewed and compared to each other, the researcher can provide the

literature with an important influence from the contrast and similarities (Vannoni, 2015).

The multiple case study was a good design for my study because I was able to analyze

the data within each situation and across situations (see Gustafsson, 2017). For the

current study, a case was defined by the school site. The site included the teachers, the

students taking the blended courses, and the F2F and online learning component in which

teachers and students interacted. This study aligned with Yin's description of case study

because I examined blended learning from multiple perspectives using multiple sources.

The cases for this study included the students, teachers, and curriculum, and were

bounded by the locations.

Consideration of Other Designs

Other research designs were considered but were deemed not suitable for this

study. These designs included narrative analysis, phenomenology, and ethnography.

Creswell and Creswell (2017) defined narrative analysis as a design inquiry from the

humanities in which the researcher studies individuals' lives to provide stories about their

experiences. The information is then retold by the researcher in a narrative chronology in

which views are combined from the participants' life and the researcher's life in a

collaborative narrative (Creswell & Creswell, 2017). This methodology was rejected

because the purpose of the current study was not to generate a narrative chronology of the

students' experience in blended learning.

Phenomenology is another research design that was considered for this study.

Phenomenological research identifies the essence of human experiences concerning a

phenomenon, as described by participants in the study (Creswell & Creswell, 2017). In

this process, the researcher brackets their experiences to understand those of the participants in the study (Baran & Jones, 2016). I chose not to use phenomenology because the purpose of this study was not to describe the lived experiences of students in blended learning, but rather to explore the motivational factors influencing student success in blended learning courses from the perceptions of students and teachers.

Ethnography is another research that was considered for this study. In an ethnographic study, the researcher collects data by observing a cultural group in their natural setting over a period of time (Creswell & Creswell, 2017). Ethnographic studies are flexible and produce data on lived experiences (Baran & Jones, 2016). Ethnography was not a good choice for this study because it involves studying a group or culture over a long period of time, which was not the purpose of the study.

Role of the Researcher

For this qualitative study, I served as the primary investigator. This role included data collection and data analysis. I developed a researcher guide and was trusted with the responsibility of ensuring high ethical standards, having a firm grasp of the phenomenon, and presenting clear procedures for protecting human rights (see Yin, 2014). The researcher role included creating the research design for the study, determining how participants would be selected, determining data sources, creating data collection instruments, and creating an environment in which participants would feel safe and free to share. I was solely responsible for data analysis and for using strategies that improved the trustworthiness of this qualitative research. To manage and minimize bias throughout the data collection and analysis process, I reviewed the data from a nonadministrator

perspective. Patton (2014) stated that it is vital to remain unbiased and subjective in research; therefore, I had to focus on the collected data as a researcher, not as an administrator or a person in educational power. In an attempt to acknowledge potential bias, I kept a researcher journal during the data collection and analysis phase. In this journal, I wrote out my thoughts, including biased thoughts that came to mind when looking at the data, as Orange (2016) suggested.

My role as the researcher was based on my interest in the blended learning phenomena and did not conflict with my present position as an assistant principal at a high school in the Midwest region of the United States. None of the participants were recruited from the district where I work. I had no supervisory influence on the students, teachers, or programs in this study. The school district with which I am affiliated does not offer blended learning courses for CR; therefore, the students and teachers in my district could not have been participants in this study. However, because of my status as an administrator in a position of power, I needed to reassure my participants of my intentions in this study. To accomplish this, I stated in the invitation letter and before the interview that I am an administrator, and I reassured the participants that my interest in the blended learning experiences was separate from this role and that I was exploring this phenomenon as a researcher. Strategies used to improve this study's trustworthiness are discussed later in this chapter.

Methodology

The methodology section provides details about how the research was conducted. In this section, I share information about inclusion criteria for participants. I also describe

the instruments I designed to conduct data collection, including student and teacher interview guides and observations of the F2F and online courses.

Participant Selection Logic

The unit of analysis for this study was bounded by the school site. Teachers, students, and online and F2F observations at a single school site made up a case. Two cases were examined for this study. Within each case, 1-2 teachers and 2-4 student participants were interviewed. Participants for this study were selected using purposeful sampling. Yin (2014) noted that the number of participants in qualitative research is often small, which is appropriate to obtain in-depth responses, collect data from other sources, and to explore multiple variables.

Sampling strategy. The teacher and student participants targeted for this study included those who were associated with high school blended CR courses. I used criterion-based sampling that included high school students over the age of 18 and teachers in blended learning courses for CR. Purposeful sampling was used for recruiting participants in this study. Purposeful sampling is widely used in qualitative research for the identification and selection of information-rich cases for the most effective use of limited resources (Palinkas et al., 2015). Purposeful sampling requires the researcher to identify or select the individuals who have prior knowledge about or have personally experienced the phenomenon being studied (Creswell & Creswell, 2017). Patton (2014) defined purposeful sampling as the logic and power that a researcher uses when selecting information-rich cases. Study samples depend on the research question investigators want

to be answered (Leedy & Ormrod, 2013). To draw inferences about general populations, samples must be generalizable to that population (Leedy & Ormrod, 2013).

At each school site, the principal identified potential participants for the study. I was provided a list of blended CR teachers and their email addresses. The teachers, if they decided to participate, provided a list of 18-year-old students who were enrolled in the blended learning CR program and their email addresses. Potential teacher and student participants were contacted via email and provided information about the study, including informed consent if they chose to participate. The email also provided a link to a demographic survey that helped me confirm that they met the study's inclusion criteria. Principals also gave me access to the school's blended learning courses and the requirements for graduation.

Inclusion criteria. Participants were recruited and selected according to specific inclusion criteria. The student study participants met the following inclusion criteria: (a) 18 years or older, (b) taking the blended learning course as a repeat course, (c) enrolled in a blended CR course at the site school. Teachers met the following inclusion criteria: (a) have experience facilitating a blended learning course, (b) be certified to teach by the state. Once I received participants' demographic information, which signaled their informed consent, I selected one to two teacher participants for this study and four to six students from each of the blended learning schools. I selected the first six students who completed the survey and contacted them to set up interviews. A thank-you email was sent to all participants who volunteered to participate in the study.

Instrumentation

For this study, I designed four types of instruments: student and teacher interview guides, a classroom observation form, and an online course observation form. These instruments aligned with the SQs, and an expert panel of two colleagues with advanced degrees in education reviewed their alignment with the SQs.

Student interview guides. The interview guides are based on research that Merriam (2009) presented about conducting effective interviews for qualitative research. Interviews allow the researcher access to perceptions of the participants and offer a better understanding of details about the phenomenon that cannot readily be observed (Merriam, 2009). Table 3 is an alignment of the three student interview questions to the SQs for this study. As per Castillo-Montoya (2016), additional interview prompts were also developed. See Appendix A.

Table 3

Interview Questions for Students Aligned to SQs

Interview questions	SQ1	SQ2	SQ3	SQ4
IQ A Describe your experiences in the blended CR class.	X			
IQ B Describe your experiences in the online portion of the blended CR course.			X	
IQ C Describe your experiences with the F2F portion of the blended learning CR course.				X

Teacher interview guides. The second instrument I designed was the teacher interview guide. Table 4 is an alignment of the three teacher interview questions to the

SQs for this study. As per Castillo-Montoya (2016), additional interview prompts were

also developed. See Appendix B.

Table 4

Interview Questions for Teachers Aligned to SQs

Interview questions	SQ1	SQ2	SQ3	SQ4
IQ D. Describe any motivational issues, positive or negative, that you observe your students experiencing as they take the blended CR recovery class.		X		
IQ E. How do you believe the course design, or set up, of the online portion of the blended CR course influences student motivation to complete the course?			X	
IQ F. In your experience how does the F2F portion of the blended learning CR course influences student motivation to complete the course?				X

Online course observation form. The third instrument I designed was a

document data collection form. This instrument is based on Merriam's (2009) research

about observations and compiling various elements and finding evidence within the

course's internal design. This document data collection form was used to answer SQ3

(Appendix C) and to triangulate what students and teachers report about the online

portion of the blended course experience. Each school classroom environment with

participants was observed. I completed one classroom observation per student participant.

I also logged into a course module that a student participant had completed recently and

completed the online course observation form. The constructs related to the conceptual

framework were used in the development of this form. A four-tier observation form was used, aligned with John Keller's ARCS Model of motivation.

Classroom observation forms. The fourth instrument I designed was a classroom observation form. The design of this instrument was based on criteria that Merriam (2009) recommended for doing observations in any setting for qualitative research that will be modified for this study (see Appendix D) as well as the constructs of the conceptual framework for the study. I designed a 4-tier observation form, aligned with John Keller's ARCS Model of motivation. The criteria of the classroom observation form included: (a) physical setting, (b) participants, (c) instructional activities, (d) conversations, and (e) subtle factors. This classroom observation form was used to answer SQ4 (Appendix D) and to triangulate what students and teachers report about the F2F portion of the blended course experience. Each school classroom with participants was observed for the duration of the class period.

Procedures for Recruitment, Participation, and Data Collection

For recruitment, I first identified schools with blended CR programs and developed a plan to obtain partnerships with those districts. To identify these school districts that offer blended learning courses for CR I used publicly accessible school district web sites. Once I identified potential schools, I contacted the principal or director and explained the purpose of my study and asked if they were willing to be included as a researcher partner for the study. I asked these individuals if they agreed to be the gatekeepers and provide me with names and emails of blended learning CR teachers and students who are 18 or more years old. The agreement also allowed me access to the CR

online curriculum portion of the blended course and access to observe the F2F classroom portion of the blended CR course. Once I had two partnership districts, I moved to recruit teacher participants.

To recruit teachers, I emailed the teachers that them first with an introduction to my study, an invitation to participate, and an informed consent form. The introduction letter included the procedure requirements of the study: a 1-hour classroom observation of their CR F2F classroom environment, and a 30-45-minute interview outside of the instructional day that will be held in a quiet location of their choosing. Instructions in the email indicated that if they consent to participate in the study, they were to follow a hyperlink to a 5-question survey, to provide demographic information about themselves, including a personal email address, in addition to the names and email addresses of blended CR students who were at least 18 years old. When selecting teachers' for participation, I selected the first two that signed the consent from each school. If no teachers consented to participate in a single school, I would look at other schools I had identified and seek a new pool of teachers. Once I had consenting teachers from two different schools, these two schools became the two cases for the study. I was then able to start recruiting student participants.

To recruit students, I let the first initiation come from teachers. They selected students that meet the criteria. Once teachers identified possible student participants for the study, I sent out emails with an introduction to my study, an invitation to participate, and an informed consent form. The informed consent included the study's procedure requirements: a 1-hour classroom observation of their CR F2F classroom environment,

and a 30-45-minute interview outside of the instructional day that will be held in a quiet

location of their choosing. Instructions in the email indicated that if they consented to

participate in the study, they were to click on a hyperlink and complete a 5-question

survey, provide demographic information about themselves, and include a personal email

address. Participants were also asked to sign up for an interview date and time. Within

the email, available dates were offered for students to select a day and time for the

interview. Throughout the process, all participants will knew their rights and were

assured of confidentiality, guaranteed protection from harm, therefore causing no impact

on the evaluation or employment of the individuals (Yin, 2014).

Table 5

Alignment of Data Sources With SQs

Data sources	SQ1	SQ2	SQ3	SQ4	RQ
Teacher interview	X	X	X	X	X
Student interview	X		X	X	X
Online course observation			X		X
F2F course observation				X	X

With data collection, I collected data from four sources. The first data source was

the teacher interviews. Via their email, I contacted participants and asked for their

preferred time and place for a 30-40-minute interview. An additional email was sent out

24 hours ahead of the agreed-upon time, a reminder with the interview date, time, and

location. Once the interview started, I used the teacher interview guide (Appendix B) to

collect data and a digital voice recorder to audio record the transaction. I used the

interview process as a conversation between the participant and myself to focus on

answering the research question (Creswell & Creswell, 2017). The interview was a one-to-one F2F interview and semi-standardized. The flexibility of a semi-standardized interview allowed for predetermined interview questions but also allowed me to ask less structured questions to permit the exploration of spontaneous issues raised by the participants (Jamshed, 2014). This type of interview offered me the opportunity to interpret nonverbal cues through observation of body language, facial expression and eye contact (Jamshed, 2014). At the end of the interview I asked the teachers for access to the online portion of the CR course. Before concluding the interview, I worked with the teachers to set up a classroom observation date.

Concerning participation, for the student interviews, participants were asked to participate in a 30 to 45 interview that will be audio recorded for accurate transcription. These interviews were conducted during the non-instructional time in a quiet area at the participants choosing. Interview questions were predetermined and not provided to the participants before the interview. Participants were asked open-ended questions aligned with John Keller's ARCS model of motivation. Data from the interviews were collected on the teacher/student interview forms (Appendix A and Appendix B).

Concerning participation, for the F2F classroom observation, teachers were asked to provide a time and date that would be best for a classroom observation. Classrooms were observed based on John Keller's ARCS model of motivation: Attention, Relevance, Confidence, and Satisfaction. The classroom was observed based on physical settings, participants, instructional activities, conversations, subtle factors, and researcher behavior. There was no communication with teachers or students during the observation.

Data from the classroom observation was collected on the classroom observation form (Appendix D).

Concerning participation, for the online course observation, the observation data document will be used to explore one to two modules based on John Keller's ARCS model of motivation. Each of these modules was examined by viewing lessons, labs, and assessments. Course requirements, class checks, and completion expectations for the modules were reviewed. Data from the online component of the blending learning course was collected on the course observation form (Appendix C).

The first instrument I designed was the student interview guide. This student interview guide instrument was based on guidelines for conducting effective interviews for qualitative research that Merriam and Tisdell (2016) developed. Merriam and Tisdell (2016) suggested that interviews were a good source of data collection and allowed the researcher to access perceptions of participants and to understand details about the phenomenon being studied. The interview questions addressed the following topics: motivation, organization, strategies, and perceptions. Interviews are widely used in data collection for qualitative research (Jamshed, 2014). The interviews took place in a quiet setting at the participants' choice but not during the instructional time of the school day. Each interview was done F2F and lasted between 30 to 45 minutes in length. All interviews were audio-recorded, and the researcher took field notes. I audio-recorded the interviews and developed transcripts for data analysis.

The second instrument that I used to collect data was observation forms. I conducted classroom observations of both the online and F2F blended CR courses at the

two high school sites. For the online course observations, I logged into the online classroom and reviewed one to two learning modules or lessons that student participants and their facilitators confirm the students had completed recently. I used the classroom observation form to record my F2F observations. I reviewed two to three modules for each student participant. According to Zaare (2013), observation collection forms can provide meaningful tasks and offer an opportunity to collect focused data and to perceive happenings systematically to organize better and analyze them.

For the F2F classroom observations, I observed an entire class period. My role during the classroom observation was an observer participant, with zero participation in any activities or instructional lessons that I am observing. During my observation, I recorded notes, collected data on the classroom observation form, and reflected on how they align with John Keller's Arcs of motivation model. At the end of the observation, I thanked the director/principal/facilitator and participants for their support and contribution to the study.

Data Analysis Plan

For the coding procedures, I conducted data analysis at two levels: level one a priori coding and the second, cross-case analysis. In qualitative studies codes are determined by words or phrases found within the data (Saldaña, 2016). At the first level, I used John Keller's ARCS model of motivation and a priori coding method. According to Blair (2015), a priori codes are created beforehand and applied to the text. I used these codes for the interview transcripts, the observation instrument, and course data collection

instrument. Then as recommended by Merriam and Tisdell (2016) and Saldaña (2016), I identified themes across the entire case.

All data were analyzed and reviewed using a priori codes. In qualitative research, coding is a universal process where the researcher analyzes and breaks down collected data to find something new (Elliott, 2018). In the first round of a priori coding, I followed the recommendation of Hahn (2008) and used Microsoft Office tools to create tables and spreadsheets from the data collected. I read the interview transcripts and examined the observation notes line-by-line, assigning various text, and a priori codes. I used this coding method for all data sources from each unit of my case.

Table 6

A Priori Codes Aligned to ARCS Motivation Model

ARCS	Definition	Potential Codes
Attention	Capturing the interest of learners; stimulating the curiosity to learn	Capture interest Stimulate curiosity
Relevance	Meeting the personal needs/goals of the learner to effect a positive attitude	Meet personal needs Perceived worth
Confidence	Helping the learners believe/feel like they will succeed and control their success	Feeling of success Control of success
Satisfaction	Reinforcing accomplishment with rewards (internal and external)	Rewards – internal Rewards - external

At the second level of data analysis, I did a cross-case analysis to examine data across all sources of evidence across each case, looking for themes, patterns, and relationships. I looked for data discrepancies, particularly about disagreements between data sources. From this analysis, I determined key findings or results from the study and presented them in relation to the RQ and SQs.

Part of the data analysis plan was knowing how to treat discrepant data. Discrepant data are data points that are unusual and stand out in the data that is being analyzed (Sartini et al., 2010). Discrepant data are instances that cannot be accounted for in the data collection but are valuable in qualitative research and plays a significant role in the validity of the findings (Kaplan & Maxwell, 2005). My plan for dealing with discrepant data was to use it "purposefully looking for variation in the understanding of the phenomenon" (Merriam & Tisdell, 2016, p. 248). If I found through this approach that specific data did not align with the conceptual framework or the a priori codes, then I acknowledged the data in my coding and reported it but did not include it in the analysis. Bashir, Afzal, and Azeem (2008) believe that negative or discrepant data should be used as a strategy to increase the validity of the research. Therefore, collected data was analyzed thoroughly for discrepant data (an exception or modification to patterns) and then used to support the validity of the research.

Issues of Trustworthiness

When looking at the trustworthiness of a study, the credibility, transferability, dependability, and confirmability should be considered. Trustworthiness is determined by the degree of confidence that the researcher has in chosen data collection and analysis methods (Polit & Beck, 2014). With any qualitative research study conducted, specific methods and procedures need to be established by the researcher (Amankwaa, 2016). In the following sections, I described how I increased the trustworthiness of this multiple case design study in relation to the constructs of credibility, transferability, dependability, and confirmability.

Credibility

For qualitative research, Merriam (2009) defined credibility is as the quality or power of inspiring belief. Merriam also recommended that qualitative researchers use the following strategies to improve the credibility of qualitative research: (a) triangulation of data from multiple sources, (b) member checks, (c) adequate engagement in data collection, (d) searching discrepant data, and (e) peer review. In qualitative research, credibility is the first aspect or criterion that must be established. Credibility is crucial in research to develop trustworthiness in a study, directly linked with the findings as they relate to reality and how truth is demonstrated (Anney, 2014). According to Anney (2014), several attributes contribute to a study having credibility: (a) prolonged engagement, (b) persistent observations, (c) triangulation, (d) referential adequacy, (e) peer debriefing, and (f) member checks.

To help ensure credibility of this study, I used data triangulation. Triangulation helps to produce credibility in a study by using the same questions with each participant and using a variety of sources to answer help answer the research SQs (Sutton & Austin, 2015). There are four types of triangulation that researchers can use: methods triangulation, triangulation of sources, analyst triangulation, and theoretical triangulation (Noble & Smith, 2014). Methods triangulation was used four this study to maintain credibility throughout by using different data collection methods. In qualitative research, some strategies can be used in the study to ensure credibility. For this study, I also used data triangulation, using different methods (interviews and observations) and perspectives (teachers and students) to help achieve a more comprehensive set of findings.

Transferability

For qualitative research, Merriam (2009) defined transferability as the ability to convey from one person, place, or situation to another. According to Korstjens and Moser (2018), the transferability of a study is based on how the results can be transferred or used in other contexts or settings. Transferability can be obtained through detailed, thick descriptions of the data. Thick description is described as the researcher providing a detailed description and the context of the participants, then transparently describe and reflect on the methods and do justice to the richness of the qualitative findings in reporting, interpreting and discussing them (Korstjens & Moser, 2018). Transferability is addressed in the study by thoroughly describing, with a detailed account, the methods utilized in the data collection to complete the research.

Dependability

For qualitative research, Merriam (2009) defined dependability as the ability to extend to which research findings can be replicated. Dependability is the third standard for judging a qualitative study and focuses on the stability and consistency process used over the time of the study. In qualitative research, dependability corresponds to the reliability criterion of positivism and can provide consistency throughout the data collection and analysis process (Simmons, 2016). In a qualitative study to achieve dependability, peer review, or a designated person can be identified for verification of the information (Simmons, 2016). Some strategies have been recommended by Merriam and Tisdell (2016) to strengthen dependability in a study, which included: triangulation, peer review, researcher reflexivity, and an audit trail. Dependability in a qualitative study is

demonstrated when a study can be replicated by other researchers, using information from the research report, and the findings will be consistent. To achieve dependability in my study, I used inquiry audit and triangulation. After collecting data, it was analyzed using data source triangulation methods to check the consistency of the findings across varying sources within the case. Triangulation is the combination of data sources, investigators, methodological approaches, theoretical perspectives (Kimchi, Polivka, & Stevenson, 1991), or analytical methods within the study (Denzin, 1970). For this study I also used an audit trail to increase dependability showing transparent steps that I took from the start of the data collection process to the development and any changes made to the final reports and conclusions.

Confirmability

For qualitative research, Merriam (2009) defined confirmability as the ability o approve. Confirmability corresponds to the objectivity criterion of positivism and refers to how the findings and interpretations result from a dependable process of inquiry and data collection (Simmons, 2016). Like dependability, confirmability uses similar assessment techniques in a qualitative study: triangulation, audit, and reflexive journals. To provide confirmability in a study, the researcher must produce findings that are based on the participants' responses without including any bias or assumptions (Sanjari, Bahramnezhad, Fomani, Shoghi, & Cheraghi, 2014). To achieve confirmability in my study, I used an audit trail, highlighting every step of data analysis and providing a rationale for decisions made.

Ethical Procedures

The trustworthiness of qualitative research depends on how researchers follow ethical procedures. In a qualitative study, the awareness towards ethical issues needs to be addressed to ensure the integrity of the researcher and to protect the research participants. Throughout studies, researchers are faced with ethical challenges from designing to reporting. Ethical procedures and trustworthiness must always be considered. Throughout the qualitative research process, researchers are required to take part in every step from defining the concept to design, conducting interviews, transcribing and analyzing data, and then verifying and reporting the concepts and themes found (Sanjari et al., 2014). Several studies have been conducted on key ethical principles in qualitative research and found the importance of autonomy, confidentiality, and protection, not harm, and informed consent (Carlsson, Blomqvist, & Jormfeldt, 2017). For this study to have the upmost standards, ethical procedures were followed, participants felt safe, understood the study's process, and knew how their information would be used for present and future studies.

In terms of ethical procedures for the case study, I addressed all concerns of privacy and safety and was transparent with all participants. First, I addressed the ethical concern about transparency by sending an invitation letter to all potential participants giving a detailed explanation of the purpose of the study. Secondly, I discussed the ethical concern of privacy and protection from harm providing each participant with an informed consent form that outlined the voluntary nature of participation and described the procedures for ensuring their privacy, confidentiality, and data collected and

analyzed. To ensure that participants felt safe in the interview setting, interviewees selected the location for the interview. I further protected participants' confidentiality by using pseudonyms for each, with a code, and only used codes on all data collection instruments in analysis discussion. All data collected from interviews and observations were stored in a secure password locked computer in a file folder. After the five years, all collected data will be deleted from the computer, and all paper files are shredded.

After receiving Walden IRB approval, I followed ethical procedures by submitting an application to the Institutional Review Board (IRB) at Walden University and received the approval 07-29-19-0563885. Through this process, the IRB looked to ensure that I followed specific criteria to get approval. The criteria included: (a) promoting informed consent, (b) voluntary participation, and (c) safety among all participants in the study. The consent form outlined each of the criteria above in detail and also included details about data collection and how participants had the opportunity to review tentative findings. I showed how I adhered to ethical standards as an investigator, followed federal regulations, and Walden's Institutional policies as they related to studying human subjects for my research.

Summary

In summary, this chapter included a description of the research method for this qualitative study. I discussed the research design and rationale, the role of the researcher, the methodology, issues of trustworthiness, and ethical procedures. I provided a detailed description of how participants were chosen, described data collection instruments and how they were used, gave a step-by-step write up of the data analysis plan, and ensured

that the study followed ethical procedures. In Chapter 4, I presented the results of this

study.

Chapter 4: Results

Introduction

The purpose of this qualitative multiple case study was to explore teachers'

perceptions and students' experiences related to at-risk students' motivation in blended

learning CR courses. To accomplish this, I used interviews, observations, and course

curriculum to explore motivation around at-risk students' participation in blended

learning courses for CR. The research question for this study was the following: How do

perceptions and course experiences influence at-risk students' motivation in blended CR

courses? The SQs were as follows:

1. What are at-risk high school students' experiences related to motivation in the

blended CR course?

2. How do CR high school teachers perceive at-risk student motivation in blended

CR courses?

3. How does the instructional design of the blended CR course influence the

student motivational experience?

4. How does the F2F component of blended CR courses influence the student

motivational experience?

Chapter 4 includes a description of the setting for this multiple case study and the

participants who met the inclusion criteria. Chapter 4 provides a description of the data

collection process, methods for data analysis, and evidence of trustworthiness for this

study. The results and discrepant data are presented. I conclude Chapter 4 with a

summary of the results.

Setting

This multiple case study was conducted at two public high schools (Site A and Site B) during the 2019-2020 academic school year. Each site offered blended CR courses to high school students giving them an alternative to gain credits to meet high school graduation requirements. Both sites used the same online program but had a different setup; one was offered during the school day as an alternative school, and the other was offered after school.

Site A

Site A, located in the Midwest region of the United States, is a high school that is part of a public school district. Approximately 900 students were enrolled in Grades 9-12 at the time of this study. The graduation rate was about 90%. The student population was 96% African American, 3% White, and 1% two or more races. The student to teacher ratio was 19:1.

Site A's blended CR courses offer students an alternative to recover credits and meet graduation requirements. Students in Grades 10-12 are allowed to enroll in after-school blended CR courses (two per semester). Students are required to attend at least 3 days per week, and each time they have to check in with the teacher. The courses are self-paced and require the students to set goals and use the check-ins to monitor progress.

Site B

Site B is a high school that is part of a public school district in the Midwest region of the United States with approximately 1,700 students in Grades 9-12. The graduation rate was 85%. The student population was 49% African American, 45% White, 3% two

or more races, 2% Hispanic, and 1% Asian. The student to teacher ratio was 25:1 in the traditional school setting, and the alternative school student-teacher ratio was 55:1. However, the alternative school has scheduled check-in days each week.

This district has created a new alternative high school within the high school that allows students to recover and gain high school credits at an accelerated pace. Students have the flexibility to attend school Monday-Thursday 7:30-2:30 and are required to spend at least one day on site with the teacher. The courses are self-paced, and students can be enrolled in a total of four classes.

Demographics

The participants for this study included two teachers and five students at two different high schools. The student participants met the following inclusion criteria: (a) 18 years or older and (b) enrolled in a blended CR course at the site school. Teacher participants met the following inclusion criteria: (a) have experience in facilitating a blended learning course and (b) be certified to teach by the state. Schools, student participants, and teacher participants were assigned pseudonyms to ensure confidentiality. Table 7 provides teacher participant demographics, and Table 8 shows student participant demographics.

Table 7

Teacher Participant Demographics

Teacher participant	Gender	BLCR teaching experience in years
Teacher A	Female	5
Teacher B	Female	1

Note: BLCR = blended learning credit recovery

Table 8

Student Participant Demographics

Student participant	Gender	Number of classes enrolled in at the time of the study
Student A1	Male	1
Student A2	Male	1
Student A3	Female	2
Student B1	Female	4
Student B2	Female	4

Data Collection

For this multiple case study, I collected data from various sources: interviews, F2F classroom observations, and observations of online course modules. On my personal computer, I created a folder to retain all of my research data in an electronic format. Data files were backed up to my cloud and were protected by a password. For approximately five months, I gathered demographic information, conducted interviews, observed F2F classrooms, and observed online courses. The demographic survey was distributed via email to the teachers, and a copy was given to the students at the time of the interview.

After the interviews, F2F observations, and online course observations were completed, I transcribed the interview data and began uploading all documents to Dedoose.

Interviews

After receiving permission from the selected sites to conduct the study, I contacted the principal at Site A and the director at Site B to obtain a list of possible teacher participants. Site A sent two likely teachers, and the director from Site B agreed to participate in the study. A consent form was emailed to the participants. The study was conducted October 2019. The interviews were private, confidential, and audio recorded with a phone and an iPad. I led the first interview with a teacher from Site B. This interview lasted approximately 45 minutes. My next interview was with a teacher from Site A. After I completed teacher interviews, I set up dates and times for student interviews. Interviews with Student B1 and B2, from Site B, were conducted on a Friday because that was the students' day off. Interviews with students from Site A were done on separate days after school. The interviews lasted approximately 45 minutes each.

I prepared interview data for data analysis. First, I transcribed audio recordings by uploading them into Kaltura and transferring them to a Word document. I then sent interview transcripts to participants for review of accuracy. Next, I uploaded the Word documents into Dedoose to prepare for coding.

Face-to-Face Classroom Observations

Following the interviews, I conducted F2F observations of the classroom using the F2F observation tool (see Appendix D). For the F2F classroom observation, I observed the (a) physical setting, (b) participants, (c) instructional activities, (d) and

conversations. First, I conducted the F2F observation of Teacher A. This observation lasted approximately one hour. During this time, I sat in the back of the classroom, had no interaction with Teacher A or the students in her classroom, and took notes in the observation form. After completing the observation, I thanked Teacher A and left the building. I then prepared observational data for data analysis. First, I took precoding notes on my classroom observation form. Next, I uploaded the Word document to Dedoose to prepare for coding.

I then conducted the second F2F observation with Teacher B. This observation lasted approximately one hour. During this time, I sat in the back of the classroom, had no interaction with Teacher B or her students in the classroom, and completed the F2F observation form. After completing the observation, I thanked Teacher A and left the building. I then prepared observational data for data analysis. First, I took precoding notes on my classroom observation form. Next, I uploaded the Word document to Dedoose to prepare for coding.

Online Course Observations

Following the interviews and F2F classroom observations, I conducted an observation of the online course using a data collection tool (see Appendix C). I observed modules from two interviewed students at both sites. First, I took notes on the data collection form based on modules that the students had completed. Next, I uploaded the Word document to Dedoose to prepare for coding.

Data Analysis

Coding is a common process in qualitative research; it is a fundamental aspect of the analytical process and how researchers break down their data to make something new (Elliott, 2018). For data analysis, I conducted two levels of coding: a priori coding and cross-case coding that Saldaña (2016) recommended for qualitative research. To aide in the coding process, I developed a codebook as described by DeCuir-Gunby, Marshall, and McCulloch (2011). A codebook is a set of codes, definitions, and examples used as a guide to analyzing interview data (DeCuir-Gunby et al., 2011). The primary tool for my data analysis was Dedoose.

Level 1 Coding

For the coding procedure, I conducted data analysis at two levels: a priori and cross-case analysis. In qualitative studies, codes are determined by words or phrases found within the data (Saldaña, 2016). At the first level, I used Keller's ARCS model of motivation and a priori coding method. According to Blair (2015), a priori codes are created beforehand and applied to the text. I used these codes for all data analysis: interview transcripts, observation instrument, and course data collection instrument. All data were analyzed and reviewed using a priori codes.

Although I had intended to follow Hahn's (2008) recommendation to use Microsoft Office tools, I used Dedoose instead. I read the interview transcripts and examined the observation notes line by line, assigning various text and a priori codes in Dedoose. I used these a priori codes for the interview transcripts, observation instrument, and course module evaluation instrument. Then, as recommended by Merriam and

Tisdell (2016) and Saldaña (2016), I identified themes across each category of the ARCS model of motivation and the frequency of the codes from all three data sources.

Discrepant data are data points that are unusual and stand out in the data that are being analyzed (Sartini et al., 2010). Discrepant data are instances that cannot be accounted for in the data analysis but are valuable in qualitative research and play a major role in the validity of the findings (Kaplan & Maxwell, 2005). As recommended by Merriam and Tisdell (2016), I searched for discrepant data, "purposefully looking for variation in the understanding of the phenomenon" (p. 257). For my study, there were no discrepant data to report.

Level 2 Coding

At the second level of data analysis, I did a cross-case analysis to examine data across all sources of evidence across each case, looking for themes, patterns, and relationships. For a second time, I used a priori codes for the interview transcripts, F2F observation instrument, and the online module observation instrument. Then, as recommended by Merriam and Tisdell (2016) and Saldaña (2016), I identified themes (see Table 9). In addition to using these a priori codes, I also used my codebook as a guide to ensure to literature alignment with the emerging themes.

The cross-case analysis of this study involved a presentation of emergent codes and discrepant data that emerged across all data sources for both cases. The themes emerged from a priori codes that were coded concerning each data source for each site. No discrepant data emerged to challenge the key findings of motivational factors of online high school CR courses.

Eight themes emerged from 4 a priori codes as a result of analysis of the interview, F2F classroom observations and online course observations. The eight emerging themes included: (a) capture interest, (b) stimulate curiosity, (c) meet personal needs, (d) perceived worth, (e) feeling of success, (f) control of success, (g) rewards-internal and (h) rewards-external. These themes inform the findings of this study, presented in the results section to the RQs and SQs. Table 9 shows a summary of codes and themes.

Table 9

Summary of Codes and Themes

Codes	Themes
Attention	Capture interest
	Stimulate curiosity
Relevance	Meet personal needs
	Perceived worth
Confidence	Feeling of success
	Control of success
Satisfaction	Rewards-internal
	Rewards-external

Themes

Theme 1: Capture Interest

Throughout the data collection process, participants commented on how capturing a student's interest influenced their overall motivational experience in the blended learning CR courses. Student engagement is crucial to student learning, motivation, and satisfaction in online learning courses. Student participants in the study described commitment related to communication or online interaction (collaborative learning) in the blended CR courses. Teacher participants from this study described finding different

ways to capture student's attention through engagement, and collaboration influenced student motivation in the blended CR course. Confirming these descriptions researchers Martin and Bolliger (2018) spoke of the importance of engagement strategies and how they should be aimed at providing positive learning experiences, including active learning opportunities, such as participating in collaborative group work, having student facilitate presentations and discussions, sharing resources actively, creating course assignments with hands-on components and integrating case studies and reflections. The following responses were prompted from SQs that describe capture interest from teachers and students' reactions:

Teacher B: "stimulated their learning through f2f meetings, provided support on test/quizzes, offered a different way of taking notes and retaught lessons when it was needed."

Teacher A: "it is attractive and appealing [the module] with the colors and graphs."

Teacher B: "[students are] encouraged they can see what lesson they are on."

Student A2: "I don't like the videos they are super long, and you tend to lose interest."

Theme 2: Stimulate Curiosity

Participants described having and interest and being driven to keep going in the blended CR course. Participants connected stimulate curiosity to their gaining and keeping their focus and were most drawn to a course when there were consistency and variability. Students liked the flexibility in the online portion of the blended CR program

and the variability that the program allowed them to learn uniquely. Teacher's related consistency and stimulating curiosity to the F2F classroom time and the ways they found it helped to gain and keep student attention. Researchers Johnson et al. (2015) agree that we take curiosity to be instrumental to and even essential for education, inquiry and knowledge is confirmed by the fact that teachers prefer techniques of instruction that excite curiosity. In Chapter 2, stimulating curiosity was introduced through inquiry arousal and how to keep students' attention through variability and consistency. The following responses were collected from students and teachers, linked to stimulating students' curiosity:

Teacher A: "it gives them [students] a feel for what college courses would look like."

Teacher B: "when there is no support [teacher], I feel like their [students] motivation is declined."

Teacher B: "it would be great, if when a student got a wrong answer [in mathematics] there was a button to click for a demonstration of how to do the problem."

Student A2: "there is always a pretest [before each module], which gives me an idea of what the module will be about."

Theme 3: Meet Personal Needs

Participants acknowledged that when they found relevance to their current and future lives while taking a blended CR course, they felt influence in their motivational experience. The literature revealed that students had a desire for flexibility and valued having the opportunity for choice (Miller & O'Brien, 2016). Participants in the study

connected the relevance of a course through having choice and flexibility. Students could choose how their day would look and have the flexibility to complete schoolwork at home or school. Teachers used choice and flexibility as a tool that motivated students throughout the blended learning CR course. The following responses were given by students, to confirm the importance of meeting their needs in blended CR courses:

Student B2: "work at her own pace"

Student A3: "I can just turn on the computer, go the website, and work on it from home."

Student B1: "there are classes in there [the module] that do a great job teaching you how to do certain things."

Student A1: "I like that I am able to go through it [the online module] at my own pace."

Theme 4: Perceived Worth

Participant's linked relevance as a critical role in how they perceive worth the importance it had on them while taking blended CR courses. Student participants understood significance in having a relationship with their teacher, which influenced their experiences and motivation in the blended CR course. Teacher participants agreed that the teacher-student link contributed to students' positive perceived worth and that this was a pivotal contributor to student motivation in the blended CR course. The literature review in Chapter 2 indicated that when blended CR courses have educators using strategies to help determine the best way for a student to learn based on achievement purposes, they are more likely to find success (Afip, 2014). The following responses were

recorded from students, during interviews, as it relates to how they perceived the importance of having a relationship with their teachers and their overall success:

Student A1: "I feel like having a relationship and knowing them [the teacher] has a lot to do with it. Someone knowing who I am and me knowing who they are keeps me motivated."

Student B1: "Procrastination would probably be an issue, but me coming here every day and seeing her [Teacher B] doesn't allow me to put it off. She makes me do it now and not be a lazy bum."

Theme 5: Feeling of Success

Participants found value in being confident and feeling successful while taking blended CR courses. Students believed that having a feeling of success was a motivating factor that influenced their experience because it was focused on them experiencing success and receiving feedback. Teachers perceived that if students had the opportunity to experience feelings of success (self-worth) in the blended CR course, they would increase their confidence. The literature in Chapter 2 linked the sense of achievement to feedback with researchers Futch et al. (2016), stating the importance of providing an atmosphere of feedback where students feel safe and comfortable for learning. The findings confirmed that students experienced a sense of motivation when they found success and got feedback from teachers. The following responses were gathered from students that confirmed the importance of meeting their needs:

Student A2: "once you get it [the question/assignment], you feel like that was easy, and maybe that momentum will carry on to the next question, and you just feel like you will get it done."

Student A1: "the videos kind of break it down [describing his feeling success in the online portion of the course.]

Student B1: "there are classes in there that do a great job of explaining the material."

Theme 6: Control of Success

Participants described having personal control of their success as a motivating factor that influences their confidence and experience in the blended CR course. Students believed that having control was a motivational influence on their experience in the blended CR course when there were clear requirements and facilitation of growth and communication. Teachers perceived that when students had control of their success, they were overall more confident and motivated in the blended CR course. The literature in Chapter 2 suggested that control meant giving students options, much like choice, but different because of immediate control in blended CR courses. The following responses were recorded by the interviews confirming the influence of having control in the blended CR course on student success:

Student B1: "I have control to stop and start on my courses, which cuts down on my anxiety."

Student B2: "I can work at my own pace to complete the course."

Theme 7: Rewards (Internal)

Participants described satisfaction as an essential element in their motivation and experience in the blended CR course. Students linked experiencing satisfaction to internal rewards such as enjoyment of learning and their self-determination. The literature suggested that intrinsically motivated students have feelings of self-determination, find learning exciting and enjoyable, and like challenges (Hennessey et al., 2015). The following responses were collected by the interview questions that confirmed influence on student's motivation when they enjoyed learning or were self-determined:

Teacher A: "they are proud of how they are doing [in the blended CR course]"

Student A3: "I do this because I want to graduate. If I didn't have CR, I would not have a chance to graduation on time."

Student B2: "I like it [enjoy the blended CR program], and I love my teacher."

Student B1: "It's a personal motivation for me to get this module done."

Theme 8: Rewards (External)

Participants described being satisfied in the blending CR course when they were praised, or there was a reward for achieving goals. Student participants enjoyed being rewarded for reaching goals and completing the course. At both sites, teachers perceived that at-risk students enjoyed being rewarded and praised for achieving goals in the blended CR course. The literature in Chapter 2 was confirmed that praise is satisfying to students and as a result, it positively affects their effort (Vijayan et al., 2016). The following responses were prompted by the interview questions that confirmed the

influence external rewards had on student's motivation when they enjoyed learning or were self-determined:

Teacher A: "Even just hearing you are on target is a huge motivator."

Teacher A: "they [students] like being praised."

Teacher B: "Definitely having their time back is a motivator [students reward is having more time at home and not being stuck at the school working].

Each theme and subject presented above validated the significance of conducting a case study on exploring the motivational factors of blended learning high school CR courses. This study was essential because it exposed changes that need to be made to increase students' overall experiences in the blended CR courses. Participants mutually agreed that having a relationship with the teacher impacted not only their experience in the courses but also their lives. Many student participants felt that without the teacher's support, they would not have found success in achieving their goals in completing the courses. During the interviews, I recognized that student participants valued most being able to have choice and flexibility when working on their blended CR courses. Although some participants have different opinions on what worked best to influence their experience and increase their motivation, the findings aligned to John Keller's ARC model of motivation (2010) and showed the connection attention, relevance, confidence and satisfaction had on influencing their experiences while taking blended CR courses.

Evidence of Trustworthiness

To ensure that a high level of trustworthiness was upheld, I used several strategies. Trustworthiness is determined by the degree of confidence that the researcher

has in chosen data collection and analysis methods (Polit & Beck, 2014). Reviewers of a study want to know if the findings are an authentic representation of the study. Merriam and Tisdell (2016) suggested that when research impacts practitioners who affect people, such as teachers that have strategies that influence a student's ability to learn, trustworthiness is essential. In the following sections, I described how I ensured credibility, transferability, dependability, and confirmability related to my study.

Credibility

Merriam and Tisdell (2016) defined credibility or internal validity as "to how the research findings match reality" (p.213) and offered strategies to improve qualitative research: (a) triangulation of data from multiple sources, (b) member checks, (c) adequate engagement in data collection, (d) searching discrepant data, and (e) peer review. I maintained credibility in the study by ensuring the data presented accurately represented participants' perceptions, experiences, and comments. I provided participants with their interview transcripts for member checking. I also used data triangulation with interviews, observations, and perceptions (teachers and students) to achieve a more comprehensive set of findings.

Transferability

Merriam and Tisdell (2016) defined transferability as the ability to convey from one person, place, or situation to another. Transferability was addressed in the study by thoroughly describing, with a detailed account, the methods utilized in the data collection to complete the research. For this study, I addressed transferability or generalizability by incorporating a detailed and thick description of settings, participants, and findings. I also

used direct quotes throughout the data analysis to ensure that the results reflected the responses and perceptions of the participant's experiences and beliefs that are highly transferable to others in the setting or the profession.

Dependability

Merriam (2009) defined dependability as the ability to extend research findings that can be replicated and describe multiple strategies that can be used to increase it, including peer examination, data collection from numerous sources, and the researcher's use of an audit trail. In this study, peer experts were used to review the questions and topics for both teacher and student participants. I used an audit trail strategy, which showed the transparent steps of the data collection process and any changes made throughout the final reports and conclusions. The strategy of triangulation was demonstrated using multiple sources of data, including interviews, F2F classroom observations, and observation of the online learning course.

Confirmability

The unique characteristic of confirmability is the aspect of trustworthiness that is closely related to researcher bias. I assured that potential researcher biases were addressed in my study by acknowledging myself as an educator, with prior knowledge and experience of blended learning, and being careful not to share my feelings. I also asked clarifying questions to encourage authentic ideas and give clear responses. To further achieve confirmability in my study, I used an audit trail of interview procedures and data analysis throughout highlighting every step and provided a rationale for decisions that were made.

Results

In this section, I have organized the results by SQs with the themes that emerged from the coding of the data. With the RQ and SQs of this study, I analyzed the results. As codes were discussed for each SQ, themes will be presented to describe the themes.

SQ1

SQ1: What are at-risk high school students' experiences related to motivation in the blended CR course?

I will share the data combined from each Site. Table 10 includes the ARCS codes and themes that were derived from students at both sites.

Table 10

SQ1: Codes and Themes

Codes	Themes
Relevance	Meet personal needs
	Perceived worth
Confidence	Feeling of success

Student experiences were collected at two sites (A and B) by interview. Relevance and confidence were the two a priori codes, aligned to John Keller's ARCS model of motivation (2010) that I coded for research question 1. The themes that emerged from relevance and confidence include: (a) meet personal needs, (b) perceived worth, and (c) feeling of success.

Meet personal needs. The most prevalent theme that emerged from students at both sites that described their experiences in blended CR courses was to meet personal needs, a theme under relevance. Students reported their needs being met by having

flexibility and choice while taking blended CR courses. For example, students

represented choice through weekly goals they set each week and flexibility through when

and where they were able to work on the course. Students liked having the flexibility to

work on courses from home or at school. Student B2 noted, "When I wake up, I do a little

bit sometimes. And sometimes, I go to school and work for the day" [on the blended CR

course]. Another example of students having choice/flexibility in the blended CR

program was shared by student B1, stating, "this program is so flexible towards what you

want to do." She felt like the program met her needs and allowed her to continue working

without anxiety and stress.

Students at both sites also believed that having the choice to make their own

weekly goals increased their motivation in the blended learning courses. Student A1

shared that for weekly check-ins, his teacher "holds him accountable" and "the goals help

me gauge how quick I can complete the class." Student A2 added that during her weekly

check-ins, "we set goals for ourselves with them [CR teacher] to see what we need to go

to the next level and not settle." She liked having the choice when setting goals for the

upcoming week and believed this contributed to her experience and increased her

motivation daily. She also noted, "what helps her the most was being able to keep track

of graduation." Students at both sites found high regard in having choice and flexibility

when it came to their experiences related to motivation in the blended CR courses.

Perceived worth. Perceived worth was another theme that emerged from student

participants at both sites, related to relevance. Perceived worth, concerning John Keller's

ARCS model of motivation (2010), showed that students linked course tracking and

relationships to their experiences and motivation while taking blended CR courses. For example, Student A3 described perceived worth, when he shared that he likes how it feels knowing "your teacher supports you [with your course goals] and has your back." He also stated, "They are very supportive. They [teachers] help you out. If you need some help, they help you." Student A2, about her teacher, mentioned, "makes sure we are still motivated within and sees how she can help." Student B1 also noted that having a relationship with her teacher is the "best feeling in the world." Student B2 found value in the relationship she had with her teacher and added:

> The environment was very welcoming. I know that when I walk through the door, I will be welcomed by a teacher that cares and students that I can count on to help me if I need it. With the type of students [in the program], it's blended, and there are a bunch of different grades. There are people [students] with different strengths and weaknesses so that you can count on them every day to at least know something about the subject you are working on.

Students at both sites found significance in having a relationship with their teacher, which influenced their experiences and motivation in the blended CR course.

Feeling of success. The third most common theme emerging from student interviews at Site A and Site B was the feeling of success. Feeling of success, in relation to John Keller's ARCS model of motivation (2010), was linked to confidence. Feeling of success was a motivating factor that influenced a student's experience because it was focused on them experiencing success and receiving feedback. The interviewed students discussed experiences feeling of success with their motivation and having a degree of

control in the blended learning CR course. Student B1 associated experiencing success through instructional videos in the online course and noted, "there are classes in there that do a great job of explaining, teaching you how to do certain things." Additionally, student B2 described her feeling of success experienced in the blended course, "Without my teacher, I wouldn't have done as good as I do, and I probably wouldn't do as well as I do in the course. She felt the feedback and experience were most influenced by her teacher. Student A1 described her experiences of success by stating, "I am just grateful for the opportunity to have these courses and pass, so I don't have to waste my summer going to summer school. Interviews at both sites show that students value experiencing success and that feeling influenced the overall experience in the blended CR course.

Based on the data from student interviews, I concluded that there are three key findings related to SQ 1. Students' experiences related to motivation are influenced by (a) their personal needs being met, (b) whether there is a perceived personal goal linked to the course, (c) and successes they have while completing a task in the blended CR course. The first finding is about student's experiences related to motivation. Students stated that their motivation increased when both academic and personal needs are being met. The second finding was that motivation increased when they set weekly personal goals for each course. The third and final, key finding was that student's experiences related to motivation increased when success was experienced when completing tasks throughout the course. These three factors have been shown to influence students' experiences with motivation while taking blended CR courses.

SQ2

SQ2: How do Credit Recovery high school teachers perceive at-risk student motivation in blended learning Credit Recovery courses?

Data were collected from two teachers from two sites (Site A and Site B). Evidence of all four categories of John Keller's ARCS model of motivation appeared from teacher interviews: attention, relevance, confidence, and satisfaction. The top themes that emerged: perceived worth, capture interest, meet personal needs, rewards-external, feelings of success. I shared the data collected from the teachers at each Site. Table 11 includes the ARCS codes and themes.

Table 11

SQ2: Codes and Themes

Codes	Themes
Attention	Capture interest
Relevance	Meet personal needs
	Perceived worth
Confidence	Feeling of success
	Control of success
Satisfaction	Rewards-external

Perceived worth. The most prevalent theme that emerged from teachers at both sites that described their perceptions of at-risk students' motivation in blended CR courses was perceived worth, under relevance. Perceived worth, in relation to John Keller's ARCS model of motivation (2010), under relevance, was linked to student course tracking and teacher relationships. Teacher A perceived her students were motivated when they tracked their course progress and made their own weekly goals. She

noted, "The students like that they can track their progress because they have a visual with a percent and a colorful bar." To support student course goals and build positive relationships, she would log into their courses and check their weekly progress. Teacher A noted, **"**As a teacher, you log in and see everyone's progress so you can know what kind of weekly benchmark they should hit at a certain point. Teacher B also used weekly check-ins and student tracking as a way to connect with her students. She used this time to have personal conversations and stated, "We talk about home life, dating, everything!" Teacher B perceived relationships were the key to influencing at-risk student's motivational experience in the blended learning CR course. She noted during a weekly check-in,

> We talked about our goals. How do we do our goals? How can I help them with their goals? Also, [we discussed] the difference between long term and short-term goals. The long-term goal maybe—I want to graduate. Or I want to go to college. And then, I have them tell me the steps so we can implement that goal.

Teacher B said, "having relationships with the students made it easier to get them to work hard, ask for help, and to talk even more on a personal level." Overall, Teacher B perceived that the relationships she had developed with her students allowed them to have honest conversations about meeting goals and even look forward to their future after successful completion of the blended CR course. Teachers agreed that the teacher-student relationship contributed to students' positive perceived worth and that this was a pivotal contributor to student motivation in the blended CR course.

Capture interest. Another theme that emerged from how teachers perceive at-risk student motivation in blended CR courses is capturing interest, under attention. Capture interest, in relation to John Keller's ARCS model of motivation (2010), links closely with student engagement. Teachers perceived that finding different ways to capture student's attention would directly influence student motivation in the blended CR course. Teacher B gave several examples of strategies she used to capture her student's attention in the blended learning CR course. To capture the interest of her students, Teacher B stated, "stimulated their learning through f2f meetings, provided support on test/quizzes, offered different ways of taking notes and retaught lessons when it was needed." Teacher A described her perception of students' interest being captured in the blended CR as, "it also kind of gives them a feel for what college courses would look like." At both sites, teachers felt that capturing a student's attention meant finding ways to engage and stimulate their curiosity in the blended CR courses.

Meet personal needs. Meet personal needs, under relevance, was another theme that emerged from teacher perceptions about at-risk students taking blended learning courses for CR. Teachers at both described meeting student's personal needs by offering them flexibility and choice to complete the modules in the blended learning CR course. Teacher A perceived using flexibility as a way to motivate students in the blended CR class. She stated, "if students were on track with the course (on their check-in day), they didn't have to take test/quizzes with her (at school)." Teacher A, also explained that because the blended CR course occurred, afterschool students had the choice of which days they would stay or choose to work at home. She also felt that the district should

consider offering the blended learning CR during the day as an alternative education style of school. Teacher B perceived her students most motivated when they had a choice. She noted,

> One thing that I do to promote [blended CR] is they can pick whatever class they want to work. They can choose whatever they want. They are not scheduled or do not have to work for one hour on each class, like a traditional class where things are planned.

She perceived that students having choice and flexibility as a tool that motivated students throughout the blended learning CR course. Teacher A also perceived that even though the students didn't like the length of the instructional videos within the blended CR course, videos were a useful tool for the students and provided them with everything they needed to succeed in the course. Her overall perception about at-risk students and motivation was that if the district provided even more flexibility (allowing the students to only have to come in after school on check-in days) where the students could do the majority of the course at home, then more students would have success completing the blended CR course.

Rewards (external). Another theme that connected teacher's perception of at-risk student's motivation in blended CR courses was rewarding (external), under satisfaction. Rewards (external), in John Keller's ARCS model of motivation (2010), suggested that students were satisfied when they were being praised, or there was a reward. For example, Teacher A stated, "when students were on target during their weekly check-in, they set new goals and were allowed to work from home" This meant students could have

at least one day where they could go home and not have to stay after school, as a type of reward. She also mentioned that she perceived students work harder on tests/quizzes because they knew if they made a specific score, they would be moved on without more instructional videos. Another perception that Teacher A had about students that working on the online portion of the blended CR course was that they were embarrassed/ashamed to even be in this predicament in the first place. For a few students, it meant that they had to quit their jobs or school sports teams they were associated with because there was a conflict with time and the commitment to the blended CR course. Teacher B also perceived external rewards as a motivating factor for students in blended credit CR courses. She found that her students enjoyed praise and sought reward when they had achieved goals. For this purpose, Teacher B stated, "I created a board that showed a 10% progression to 100%. Students were able to use apples or stars and move them daily." She also used snacks such as goldfish and dumdum suckers, and when students completed a course, she would give them a pizza party. Teachers at both sites perceived that at-risk students enjoyed being rewarded and praised for achieving goals in the blended CR course.

Feeling of success. The last theme that emerged from the high school teacher's perception of at-risk student's motivation was the feeling of success, under confidence. Teacher's linked students' confidence with experiencing success. Teacher B perceived her students felt confident when they log into the course stating, "I like the fact that they can tell what their grade would be at the moment and if they are on pace/track." She also mentioned, "they can see how many questions are on unit tests, they can see what lesson

they are on, and they can go back and forth on the instruction videos if they need to."
Students at school Site A were required to take tests/quizzes with the teacher; Teacher A
felt "she could allow the students to take tests/quizzes on their own, and if they did not
pass, then F2F should be added. She believed this would increase motivation and
confidence to do the course on their own because it allowed them to experience a form of
personal success. Overall, both teachers perceived that if students had the opportunity to
experience feelings of success (self-worth) in the blended CR course, they would have an
increase in confidence.

Based on the data from teacher interviews, I concluded that there are five key
findings related to (SQ2) how teachers perceive at-risk student motivation in the blended
CR courses. Teacher perceived that at-risk students' motivation was influenced by (a) a
perceived worth in the blended CR course, (b) having their attention captured, (c)
meeting their personal needs, (d) offering rewards (external) based on achievement, (e)
and experiencing feelings of success during the blended CR course. The first key finding
is that students do better when they perceive the worth and value of the course they are
taking. Students at both sites found relevance when they had choice and flexibility.
Secondly, teachers perceived that student's motivation increased when their personal
needs were met. This was measured through students being able to track how they were
doing in the course and the relationships they have with their teachers. Third, teachers
perceived that students liked being rewarded. The types of rewards described were
external such as praise and reward. Finally, teachers perceived that students did best
when they had the actual feeling of success. This feeling was demonstrated through them

experiencing success in the course and with-in. In relation to John Keller's ARCS model

of motivation (2010), teacher's perception of at-risk student motivation in the blended

CR course was that students' were most motivated when they had attention, relevance,

and confidence present.

SQ3

SQ3: How does the instructional design of the blended CR courses influence the

student motivational experience?

Data that helped answer the question included student interviews, teacher

interviews, and online course observations. I will share the data collected from each Site.

Table 12 consists of the ARCS codes and themes.

Table 12

SQ3: Codes and Themes

Codes	Themes
Attention	Capture interest
Relevance	Meet personal needs
Confidence	Feeling of success
Satisfaction	Rewards-external

Data were collected from students, teachers, and online observations from two

sites (Site A and Site B). In relation to John Keller's ARCS model of motivation (2010),

all codes were present: attention, relevance, confidence, and satisfaction.

Student experiences. The top themes that emerged from student experiences

were: (a) meet personal needs, (b) capture interest, (c) feeling of success.

Meet personal needs. The most prevalent theme that emerged from student

experiences about the instructional design of an online course, and the influence that it had on motivational experience was to meet personal needs. Meet personal needs, in relation to John Keller's ARCS model of motivation (2010), under relevance, were linked to choice and flexibility. Students from both sites mentioned different examples of how the course's instructional design allowed them to choose what they would be working on and the flexibility to work at their own pace. Student A1 mentioned the way the course was designed, "I can do it anytime, anywhere, and from my phone." Student B2 had a different opinion about the flexibility of the course design stating, "I had some bad experiences where I wasn't able to go back," giving an example of a time when she was unable to change an answer or correct a misspelled word.

Capture interest. The second theme that emerged from students about the instructional design of the online course and the influences it has on a student's motivational experience was capture interest. Capture interest, in relation to John Keller's ARCS model of motivation (2010), under attention, described student engagement. Students connected student engagement in the online portion of the blended CR course to social presence. Students from both sites mentioned the importance of the instructional videos but felt the length was too long. Student A3 stated, "I like everything [about the online program] until you get to the videos," explaining that they are too long. However, she did mention her interest would sometimes be captured with the videos because they were interactive. She could also see the bar graphs when she logged in, which showed her progress in the course. Similarly, Student B2 mentioned, "that she liked the online portion [of the course] a lot, but the English course she was enrolled in was too long."

Although student A2 mentioned that she didn't like the videos, she also noted, "she was committed to complete the course and motivated because she wanted to graduate."

Feeling of success. The third most emergent theme connected to student experiences and the instructional design of influencing the student's motivational experience was the feeling of success. Feeling of success, in relation to John Keller's ARCS model of motivation (2010), under confidence, described students' experiences of success in the online learning environment. Student A2 noted what has helped with her experience of feeling success in the online portion of the course, mentioning, "you always get a pretest to prepare you for what the module is about and the lesson plan for the module." Student B2 felt she experienced a feeling of success "at the end of the module test because when you pass them, you get to move on [right to the next test]."

Teacher perceptions. For teacher perceptions, the top themes that emerged from teacher perceptions were: (a) rewards-external, meet personal needs, (c) feelings of success.

Rewards (external). The most prevalent code that emerged from teachers' beliefs about the instructional design of the blended CR course and what influenced students' motivational experience was rewards-external, describing satisfaction in relation to John Keller's ARCS model of motivation (2010). Teachers at both sites believed that student's motivation was influenced most when they were praised, or there was a reward for the achievement of work they had done in the blended CR course. Teacher A found that when she verbally recognized hard work letting her students know how proud she was of them, stating, "It gives them [students] motivation to hear me say, they are on target.

"They [students] are proud, they [students] are on track." Teacher B: "I created a chart that shows the progression from 10% to 100%. They can use apples or stars to move them daily or weekly."

Meet personal needs. The teachers from both sites felt the online learning component met students' needs. Teacher A stated, "I like the video aspect of the course because [everything that they need] it's right in front of them." Teacher B described:

With the instruction video [in the module], they [students] can listen to the full 20-minute video, and even after they have progressed [completed the lesson], they can always go back, and the video will save where they are. I like the fact that they tell them [students] what their grade would be if they were not to finish the course anymore. I like the fact that it shows if they [the students] are on pace/track to complete the course on time.

Feeling of success. Another code that emerged from teacher perceptions of the blended CR course was students needed to experience a feeling of success. Teacher A described students having a feeling of success "when they log in and can see their progress." Teacher B felt that the online design influenced her students the most because "it held them accountable for their success." She also believed that when her students saw the 100% completion, the success they felt motivated them to continue and influenced their experience.

Online observations. For the online course observations, the top themes that emerged from online observations were: (a) meet personal needs, (b) capture interest, and (c) feelings of success.

Meet personal needs. The course design offered multiple opportunities for students to have their personal needs met from the online course observations at both sites. Students were able to track their progress in the course, check their current course grades, and work at their own pace to complete the course. The courses are designed so that students receive instruction, practice what they have learned, and take assessments to check for mastery in the online portion of the blended CR course. Meeting students' personal needs through the instructional design of an online learning course means offering them flexibility and choice.

Capture interest. Online observation of student modules at Site A also showed evidence that students' interest could be captured. From the login where students could measure their progress to the actual instruction videos and checks for understanding. The online lessons were predictably detailed, an organized introduction to practice problems, and an assessment (quiz/test) to check for understanding and mastery. Students had different opportunities to be actively involved in the lesson from the videos to the interactive practice. In my observation of the online portion of a student's modules at Site B, navigation of the course was clear, and there were many opportunities for students to be actively engaged within the blended CR course. For example, the introduction of a lesson, within a module, students were able to watch a video, practice what they learned with assistance and check for understanding, and then take a quiz and final assessment to complete a section of the module. In summary, capturing student's interest in the instructional design of the online portion of the blended CR course meant that students had multiple opportunities to be engaged, which influenced their motivation in the

course.

Feelings of success. In my online observation of the instructional design of the online learning modules, I found several examples of how feelings of success were measured by students in being able to tell if they are on track with the course; when they answer questions, it shows if its right or wrong and gives the correct answer; and how many more assignments/test/and quizzes they need to complete to finish the course. The course is also designed to allow students multiple opportunities to take and pass a test or quiz. The online learning course's instructional design allowed students to experience success through the learning environment, where tools and strategies were embedded to support student learning. The course's instructional design allowed students to feel successful when they logged in and could measure their progress by their grade, to see how many lessons they needed to complete a module and measure to see if they were on target to complete the course. For students to experience motivation in the online portion of the blended learning CR course, they must experience a feeling of success.

Based on the data collected on the online courses' instructional design, I concluded that there were three key findings related to SQ3**.** Students' experiences related to motivation in the instructional design of the online portion of the blended CR course are influenced by (a) their personal needs being met, (b) their attention being captured through engaging videos(c), and experiencing successes they while completing tasks in the online course. First, students felt their personal needs were met in the instructional design of the course when they had a choice in what they worked on and the flexibility to work at their own pace. Secondly, motivation increased when the student's

attention was captured when they were engaged (social presence) with the instructional videos. The third finding was that student's motivation increased when the instructional design allowed them to experience success through the online learning environment, specifically being able to use strategies and tools that were provided. The instructional design of the blended learning course influences students' experiences of motivation when their needs are met, their attention is captured, and they experience a feeling of success.

SQ4

SQ4: How does the F2F component of online/blended CR courses influence the student's motivational experience?

I will share the data combined from each Site: teachers, students, and F2F classroom observations. Table 13 includes the ARCS codes and themes derived from data at both sites.

Table 13

SQ4: Codes and Themes

Codes	Themes
Attention	Capture interest
Relevance	Meet personal needs
	Perceived worth
Confidence	Feeling of success

Data that helped answer that question included student and teacher interviews and F2F classroom observations. According to John Keller's ARCS Model of Motivation (2010), the three codes that influenced the student motivational experience in the F2F component of the online, blended CR course were attention, relevance, and confidence. I

will share the data collected.

Student experiences. The top themes that emerged from student experiences were: (a) meet personal needs, (b) perceived worth, and (c) capture interest.

Meet personal needs. The most prevalent code that emerged from determining what factors influence students in the F2F component of the blended CR course was to meet personal needs. In relation to the F2F component and John Keller's ARCS model of motivation (2010), under the code relevance, student's needs were met through choice and flexibility. Students at both sites connected choice and flexibility to the F2F instruction time with the teacher, using flexibility and choice to complete module tasks. Students felt that teachers [staff] provided them with a warm and safe learning environment that allowed them to make choices in how and where assignments were completed. Student A3 described liking the F2F component a physical presence of her teacher to help support her during the blended CR course stating, " with a physical body it's like having someone that you can sit with and ask questions until you get it." Another student (A2) had similar feelings and noted, "the staff here is great with helping children understand even more and allow you to ask questions continuously." This comment showed that she felt comfortable asking for help, which increased her motivation in the course. For other students, it was the flexibility of the F2F that was motivating. Students at Site B valued having choice and flexibility in the F2F portion of the blended learning course. Student B1 felt "this program is so flexible for what you want," and during the F2F, she can talk with her teacher and make her own choice as to what she is working on for the day. Student B2 felt the F2F allowed a chance to "focus more" as she described

being able to have the flexibility to work at her own pace and not be overly stressed. Student's needs were met in the F2F component of the blended CR course through F2F instruction and encouragement, which influenced their experiences in the blended CR courses.

     Perceived worth. The second theme that emerged from SQ4 that influenced the students motivational experience connected to the F2F component and blended CR courses was perceived worth. Perceived worth, in relation to John Keller's ARCS Model of Motivation (2010), under relevance, linked student-teacher relationships. Student A1 noted, "F2F portion is very beneficial, it helps me truly master material with an individual and not just trying to figure it out." She believed that her teacher was there to help in any way that she could. Student A2 stated,

> I think chemistry is important to have with people. When you have someone face to face to help you, and you all have that chemistry to work things out—things just go much smoother. When you are doing it alone versus when you have the teacher to help you, everything just moves faster. And the hope is that you carry that same momentum into the next lesson.

Student A2 also mentioned, "I prefer the one-on-one over the videos because I can't ask the video questions." Additionally, Student B1 described having a relationship with her teacher as "the best feeling in the world because I know I can come in here if I have problems with questions, and she will support me no matter what."

     Capture interest. The third theme that emerged from SQ4 associated with the F2F portion of the online, blended learning CR course that influenced the student's

motivational experience was capture interest. Capture interest, in relation to John Keller's ARCS Motivation model (2010), under attention, described student engagement (communication). One student from Site A believed his interest was captured most by "his interaction with his teachers." Setting goals to the weekly check-ins, he felt his attention was captured the most, which influenced his overall experience in the course. Student B1 spoke very highly of the conversations that she had with her teacher and how the F2F time has influenced her motivation in the blended CR course. She mentioned, "we have daily/weekly contact where she will talk to us about what we are learning and see if we struggled with anything." This helped her know that she always had support in the course. Student B2 felt the F2F gave her a real-life connection with the teacher because she was real with her, and "she constantly reminds us that she has been our age before."

Teacher perceptions. For teacher perceptions, the top themes that emerged from teacher perceptions were: (a) capture interest and (b) perceived worth.

Capture interest. The most prevalent theme that emerged from the F2F component and teacher perceptions capture interest. Although Teacher A was only with her students after school a few times per week, she spent time building relationships through communication and engagement during their weekly check-ins, after school class days, and via email. She spent a portion of the check-in time, communicating about the students' dreams and goals, and she would use these talking points to engage her students when they were struggling with motivation. She also used check-in time to reward her students, which she felt helped to capture their attention and increase engagement. She

stated, "the check-in was more like rewarding to them if they were on track and making the grade-I would let them go home." Teacher B was with her students all day and spent the vast majority of her time building relationships through communication with her students. She was a big believer on students being engaged in their learning (goals) and required them to get higher than the minimum grade stating, "they know they are better than the bare minimum [passing grade] and they [students] have shown me before, so I make them go back [into the module] and fix it [assignment/assessment]." During my F2F classroom observation at Site A, I noted the set up of Teacher A's classroom (an elaborate setup that would capture a student's interest). There were visuals throughout the room that let the students know where they were in terms of meeting their weekly and course goals. There were also pictures of students that had previously graduated and gone through the CR program to help motivate her students.

   Perceived worth. Another theme that emerged from teachers related to the F2F portion of the blended CR course and its influence on student motivation was perceived worth. Teachers at both sites believed that the F2F portion of the blended CR course positively influenced student experiences by offering them the opportunity to form relationships that provided them with encouragement and support throughout the course. Teacher B believed that through relationships, she could be 'real' [have honest conversation] with her students and help them understand what it takes to achieve goals and connect them to the future. She spent a portion of the F2F time [building relationships] describing "socializing with her students and building a relationship where they felt safe." She stated, "I can form relationships with students and reach them where

they are." Teacher A believed the same about developing relationships, saying, "they [students] will work for you when you take the time to get to know them."

F2F classroom observations. For the F2F classroom observations, the top themes that emerged were: (a) meet personal needs, (b) perceived worth, and (c) capture interest.

Meet personal needs. In the F2F classroom observations, I observed students working individually, with classmates and conferencing with the teacher. The teacher from Site A used F2F to check progress and reward students that are on target, but she made students behind in their work sit closer to her so she could better monitor their work. She also kept personal student trackers hung up in her classroom to give students another visual of their goals and progress. Teacher A spent time talking with the students, and at the end of class, she reminded her students of different ways to communicate with her [outside of class]: cellphone, email, and F2F. Teacher B helped students meet their personal needs by assisting them to set goals of completion per day/week and checking in with them to see how they were doing to achieve these goals.

I also found in my F2F classroom observations, teachers demonstrating the importance of flexibility and choice. Teacher B set a regular daily schedule [which provided students with choice and flexibility to design their day] and helped students stay on target to meet their goals. She had student goal sheets listed for them to view daily to stay on target. I also noticed that Teacher B let students make their schedule and choose what days per week they would attend class and kept a calendar for them to update it frequently (the school offered classes Monday-Thursday and Friday was check-in day).

Fridays gave students the flexibility to work at school at home or go to work at their job. Teachers at both sites believed the F2F component gave them the flexibility to communicate with students through conversation personally, instruction, group work, and monitor their progress.

Perceived worth. In my F2F observation at Site A, I observed positive attitudes between teachers and students and how it made them want to work on their courses. Teacher A made different gestures [like high fiving her students or giving them sticker or certificate] to acknowledge achievements show her support of students doing good work. She also kept a visual wall tracker [measuring student progress]in the room as a visual reminder of their goals. In my F2F classroom observation at Site B, I found that the teacher had developed a relationship with each of her students. She offers different ways to communicate (email, phone calls, text messaging, and F2F) with the students that provide an open door policy. F2F relationships at both sites have been established as a critical factor for influencing students' motivational experience in the blended CR course.

Capture interest. During my F2F classroom observation at Site B, the classroom set up was long tables with three computers at each table. There were 30 computers in the classroom. It was evident from my observation that Teacher B has developed individual relationships with her students by how they communicate. She also lets them choose how their day will look, which was another way she found would capture their interest and influence their motivation in the blended CR course. The F2F component of the blended CR program had a significant influence on student's motivational experience throughout the course.

Based on the data collected on the F2F component of the blended CR courses and the influence it had on students' motivational experience, there were three key findings. Students' experiences related to motivation in the F2F portion of the blended CR course are influenced by (a) their personal needs being met, (b) a perceived worth of a personal or goal, (c) and having their attention captured through engagement with their teachers. First, students felt their personal needs were met in the F2F portion when they had choice and flexibility. They had a choice on what they worked on each day and the flexibility to work on the course wherever they chose [home, school, etc.]. Second, students' motivation was influenced by the F2F component of the blended learning CR course when they perceived worth of a personal or future goal. Students connected perceived worth in the F2F portion of the course when they were able to track their progress and having a relationship with their teachers. Third, students at both sites valued having their interest captured. Capturing attention in the F2F component meant students were engaged in their learning and with their teachers. Overall, students' experience was influenced in the F2F component when their personal needs were met, they found a perceived worth in the course, and their attention was captured. Table 14 summarizes the key findings of the SQs, which were developed from 8 emerging themes in 4 codes during data analysis. Table 14 is a summary of key findings for both cases.

Table 14

Summary of the Key Findings for Both Cases

Research question	Key findings
SQ1: What are at-risk high school students' experiences related to motivation in the online/blended credit recovery course?	Students' experiences related to motivation are influenced by (a) their personal needs being met, (b) whether there is a perceived personal goal linked to the course, (c) and success they have while completing a task in the blended CR course.
SQ2: How do credit recovery high school teachers perceive at-risk student motivation in online/blended recovery courses?	Teachers' perceived that at-risk students' motivation was influenced by (a) a perceived worth in the blended CR course, (b) having their attention captured, (c) meeting their personal needs, (d) offering rewards (external) based on achievement, (e) and experiencing feelings of success during the blended CR course.
SQ3: How does the instructional design of the online credit recovery course influence the student motivational experience?	The instructional design of the online CR course influences student experiences when: (a) their needs are met, (b) their attention being captured, and (c) experiencing feelings of success.
SQ4: How does the F2F component of online/blended Credit Recovery courses influence the student motivational experience?	The F2F component of the blended CR course influences students' motivational experiences when (a) their personal needs are met, (b) a perceived worth of a personal goal is linked to the course, and (c) having their attention captured through engagement with their teachers.

Central Research Question

The research question that guided this study was: How do perceptions and course

experiences influence at-risk student motivation in online/blended credit recovery

courses? I will discuss the results aligned with John Keller's ARCS model of motivation

framework: attention, relevance, confidence, and relevance. The table below (Table 15)

describes all the codes, themes, and examples used to answer the RQ.

Table 15

RQs: Codes, Themes, and Examples

Codes	Themes	Examples
Attention	Capture interest	Student engagement
Relevance	Meet personal needs	Choice/flexibility
	Perceived worth	Teacher relationships
Confidence	Feeling of success	Experience Success/feedback
Satisfaction	Control of success	Clear requirements
	Rewards-external	Seek reward/enjoy praise

First, I will address the elements of motivation related to attention. Overall results show that student's motivation was influenced when their attention was captured. Data showed students' interest being captured through the online course videos, and by regular communication with their teachers during F2F and weekly individual check-ins. Teachers from both sites agreed with students and felt the instruction videos were engaging and attractive with different graphs and colors that measured progression. My online and F2F observation found that students were engaged in their learning when they could visually see what they had achieved and held themselves accountable through check-ins and wall trackers—capturing a student's attention meant figuring out the *what* and then using that to engage students.

The second element of motivation was the code relevance. Relevance in John Keller's ARCS model of motivation connected characteristics that were related to meeting personal needs and perceived worth. Overall results show that students are influentially motivated when their personal needs were met, and they found a perceived worth in the blended CR courses. Students felt that personal needs and perceived worth

were met at both sites. They had the choice, flexibility, and teacher relationships. Students were given a choice to decide what they were working on daily and flexibility with where they chose to work on the blended CR courses (home or school). Teachers at both sites agreed that their students worked best when they got to set their own weekly goals and were held accountable to those goals during check-ins. The online and F2F observations corroborated what students and teachers felt that if students' personal needs were met and they found relevance in the courses they were taking, it influenced their overall motivational experience in the blended CR course.

Relationships are one of the most important motivational factors in the blended learning CR course. Results from both sites showed that students and teachers both valued having a relationship with each other. Students from both sites found that having a relationship helped with their accountability, increased lesson understanding, and gave them a much-needed support system while taking the blended CR courses. Teachers agreed that the relationship was crucial to student success in the blended CR courses and demonstrated its importance by using some check-ins focused more on personal issues than the actual course. The online and F2F observations confirmed what students and teachers both stated. They found that students were most successful in the blended CR course when they had a relationship with their teachers and were held accountable for meeting weekly goals.

The third element of motivation was confidence. According to John Keller's ARCS model of motivation (2010), confidence in the blended learning course was described the themes feeling of success and control of success. Results showed that

students needed to have a feeling of success and control of their success while taking blended CR courses and use the influence as a motivation in their overall experience in the course. Students from both sites felt experiences success when they logged into their course and saw the progress they had been making. They believed that being able to see their progress, set weekly goals, and had check-ins gave them control over the success that they were/were not having in the blended CR courses. Teachers from both sites agreed when students experienced success and had control over their learning, they were motivated and had a better experience in the blended CR course. The online and F2F observations exhibited at both sites connected teacher and students' thoughts, agreeing that when students experienced success that they had control over their motivation increased. Giving students control over the success and letting them experience success through goals they have set influences overall motivation in the blended CR course.

Last, the element of motivation was satisfaction. John Keller's ARCS model of motivation (2010) linked the theme rewards as an influential factor of student's experiences in the blended CR course. Results showed that students found satisfaction internally and externally that influenced their overall experience and motivation in the blended CR course. Students at both sites experienced satisfaction because they enjoyed learning and were determined to have success in the blended CR course. They also found satisfaction in seeking rewards and praise. Teachers at both sites agreed that satisfaction influenced motivation because students worked harder when there was a reward or praise involved. They also believed that when there was an external reward that internally students enjoyed learning and were more determined. Although satisfaction is the last

element of John Keller's ARCS model of motivation when students are satisfied, they pay more attention, find what they are working on relevant, and are more confident in work being done.

Summary

The purpose of this qualitative multiple case study was to explore teachers' perceptions and students' experiences related to at-risk students' motivation in blended CR courses. In Chapter 4, I provided the results of the research, including relevant themes that emerged. This section provided participant demographics, data collection procedures, data analysis, findings, interview and observation results, and results from participants by themes, categories, and evidence of trustworthiness. In Chapter 5, I conclude with the interpretation of the findings, limitations to the study, recommendations for future study, and implications for social change.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this qualitative multiple case study was to explore teachers' perceptions and students' experiences related to at-risk students' motivation in blended learning CR courses through Keller's (2010) ARCS model of motivation. I used a multiple case study to gain a deeper understanding of student experiences and teacher perspectives of at-risk students' motivation in blended high school CR courses. I examined how educators, the classroom environment, and the online course design influence motivation experiences of at-risk students in blended CR courses. My analysis may substantiate how motivational factors contribute to students' experiences in blended CR courses. The findings from this study may provide traditional and alternative high schools with insight on blended CR course development, strategies, and tools to increase positive experiences and improved student support.

I based the study on the following RQ and SQs:

RQ: How do perceptions and course experiences influence at-risk student motivations in online/blended CR courses?

SQ1: What are at-risk high school students' experiences related to motivation in the online/blended CR course?

SQ2: How do CR high school teachers perceive at-risk student motivation in online/blended recovery courses?

SQ3: How does the instructional design of the online CR course influence students' motivational experiences?

SQ4: How does the F2F component of online/blended CR courses influence students' motivational experiences?

Key findings related to the SQs indicated that components of Keller's (2010) ARCS model of motivation (attention, relevance, confidence, and satisfaction) were factors that influenced students' motivational experiences in blended CR courses. The findings for SQ1 were that students' experiences related to motivation were influenced by (a) their personal needs being met, (b) whether there is a perceived personal goal linked to the course, (c) and success they have while completing a task in the blended CR course. The findings for SQ2 were that teachers' perceived at-risk students' motivation influenced by (a) a perceived worth in the blended CR course, (b) having their attention captured, (c) meeting their personal needs, (d) offering rewards (external) based on achievement, (e) and experiencing feelings of success during the blended CR course. The findings for SQ3 showed the instructional design of the online CR course influenced student experiences when (a) their needs are met, (b) they find a perceived worth in having the course, and (c) their attention is captured through engaging course videos. Lastly, the findings for SQ4 showed the F2F component of the blended CR course influenced students' motivational experiences when (a) their personal needs are met, (b) the perceived worth of a personal goal is linked to the course, and (c) their attention is captured through engagement with their teachers.

In this chapter, I interpret the findings for the SQs. Next, I connect the SQs to the literature review and conceptual framework. Also, I provide recommendations for future research and practice, implications for positive social change, and a conclusion.

Interpretation of the Findings

In this section, I describe how the findings confirm, disconfirm, or extend knowledge by comparing them to what was shown in previous research. I share an interpretation of the SQ related to Keller's ARCS model of motivation about the influential factors of motivation on student experiences in blended CR courses.

Student Experiences

The findings related to SQ1 were that high school blended CR students' experienced an influence in motivation with (a) their personal needs being met, (b) a perceived personal goal being linked to the course, (c) and successes while completing a task in the course. Results showed that students' found an increase in their motivation when their needs were met through flexibility and choice, which a blended CR course offers, and confirmed what other studies indicated to be true for traditional high school students (Andrade & Alden-Rivers, 2019; Harrell & Wendt, 2019). Another result from my study showed students' experiences of motivation being influenced by a perceived personal goal. Students were motivated when they saw how goal setting helped them increase their course achievement. Students in my study were motivated by the small successes that goal setting offered. Through goal setting, students were able to experience a feeling of success. Schwarzenberg and Navón (2020) also showed the importance of student experiences with goal setting in blended courses because it makes success reachable and promotes independence of learning and positive interactions. The current study extends previous research to the population of at-risk high school students taking blended courses for CR.

Teachers Perceptions

Findings related to SQ2 indicated that teachers perceived at-risk students'

motivations were influenced by (a) perceived worth of the blended CR course, (b) having

their attention captured, (c) meeting their personal needs, (d) offering external rewards

based on achievement, (e) and experiencing feelings of success during the blended CR

course. The results showed that teachers perceived at-risk student motivation to be

influenced when they could attach a perceived worth such as graduation, which confirms

what other researchers found for Grade 8-10 students (Lerang, Ertesvåg, & Havik, 2019),

but extends the research for older students trying to graduate from high school. The

results from my study also indicated that teachers perceived students' motivation were

influenced when their attention was captured through engagement and collaborative

learning, confirming research by Halverson and Graham (2019) who described how

different levels of engagement have different impacts on students' attention. This may

mean that teachers need to use different strategies for various students to capture their

attention.

Results from my study also showed that high school teachers perceive at-risk

students to be motivated when their needs are met. Teachers at both sites described ways

to meet students' personal needs by offering flexibility and choice to complete the

modules in the blended CR course. Owston (2018) found that students experience more

satisfaction and prefer the blended learning method because it provides choice and

flexibility about when and where they can participate in the online portion of their course.

Additionally, teachers in the current study perceived student motivation to be influenced

by external rewards based on achievement, which included praise and reward. Royer, Lane, Dunlap, and Ennis (2019) showed the importance of external rewards of praising students in the traditional school settings as having a positive impact on motivation. Teachers in the current study also perceived student confidence was linked to experiencing success while completing modules in the blended CR course. Bickerstaff, Barragan, and Rucks-Ahidiana's (2017) results showed the nature of experiences and the positive impact on student experiences. Results from my study confirm and extend the literature to include at-risk high school students in blended learning CR environments.

Instructional Design Face-to-Face Classroom

The findings of SQ4 related to the F2F portion of the blended CR. Findings indicated that students' experiences linked to motivation and influence were (a) their personal needs are met, (b) perceived worth of a personal goal is linked to the course, and (c) attention is captured through engagement with their teachers. Results showed that students connected their needs being met in the F2F portion with an environment that allowed them to make choices in how and where assignments were completed, and the flexibility to complete the tasks in a F2F setting or online. Maseleno et al. (2018) and Huang (2016) showed similar findings in their studies: (a) student choice allows deciding what course or path will be best to achieve the blended learning course goals and (b) instruction in F2F plays a significant role in student learning because teachers can design learning activities, provide direct instruction, and explain supplemental learning materials. Current study results showed that students' experiences were influenced when they linked a perceived worth of a personal goal to the course they were taking. Students

described relationships with their teachers as a critical component to their perceived worth, achieved goals, and increased motivation. Sparks (2019) showed the importance students found in their needs being met in the F2F with teacher relationships, confirming what other studies indicated to be right about the impact of teacher relationships for high school students. Additionally, student motivation in the current study was influenced in the F2F portion when students' attention was captured through engagement with their teachers. Smyth et al. (2012) found the F2F instructor is important in blended environments because the instructor enables opportunities for student communication and feedback with peers and faculty, enabling students to gain confidence and apply skills they are learning in practice. Smyth et al.'s findings confirmed the results of my study, which extended the current literature to at-risk high school students taking blended courses for CR.

Research Question

With respect to the RQ, the findings were connected to Keller's (2010) ARCS model of motivation. The ARCS model is based on a synthesis of motivational concepts and characteristics divided into four categories: attention, relevance, confidence, and satisfaction (Keller, 2010). The first finding from the RQ focused on attention. Results showed that students' motivation was influenced when their attention was captured through online course videos, regular communication with their teachers during F2F, and weekly individual check-ins. Veliyath, De, Allen, Hodges, and Mitra (2019) argued that learning is determined not only by what the instructor teaches, but also by how the student receives that information, and suggested that an attentive student will be more

open to obtaining knowledge than a bored or frustrated student.

The second finding from the RQ focused on relevance. Results showed that students were motivated when their personal needs were met and/or they found a perceived worth in the blended CR courses, which students linked to choice and flexibility. Fortin, Viger, Deslandes, Callimaci, and Desforges (2019) found that students were more satisfied when they had opportunities in the blended CR courses. The third finding from the RQ was linked to confidence. Students reported experiencing and having success in the blended CR course through the online instruction, precise course requirements, and feedback. Awidi and Paynter (2019) found that students benefit from a blended learning experience when learning designs are planned and effectively aligned. My study extends the literature in blended learning for CR.

The last key finding from the RQ is linked to satisfaction. Results showed that students experienced satisfaction when they were rewarded through praise, enjoyed learning, and had self-determination to find success and complete the blended CR courses. Purnomo, Kurniawan, and Aristin (2019) showed that when praise is used appropriately, both intrinsically and extrinsically, independent learners in the blended learning environment will experience increased satisfaction. My study extends the current literature to at-risk high school students in CR courses.

Limitations of the Study

The qualitative research design for this study created a few limitations. The first limitation was the number of cases. This multiple case study was limited because it included only two cases. Yin (2014) affirmed that theoretical replication for case study

research as "the selection of two (or more) cases in a multiple case study because they are predicted to have contrasted findings, but for anticipatable reasons" (p. 241). I chose two high schools for this study because I anticipated they would provide contrasting findings. There were differences in the diversity of the student and teacher population, which I thought might influence how they responded to beliefs of what influenced motivational experiences when taking blended CR courses. With one or two more cases, I would be able to explore more in-depth student experiences, teacher perspectives, the course design, and the impact of the F2F component had on the classroom environment.

The second limitation of this research was the sample number of participants in the study. I interviewed two teachers and five students. This small sample size, as a result, limited the transferability of the findings. The inclusion of another case may have presented a more comprehensive picture of motivational factors that influence student's experiences in the blended CR course.

Lastly, the third limitation was the data collection process for my study. I collected data from one initial interview (teacher and student), one classroom observation, and online course observations from each student participant. A follow-up interview to address any misconceptions or to gain further understanding of what was previously stated in the interview may have provided more abundant data. Multiple F2F classroom observations may have added a more in-depth understanding of important factors that the F2F component provides that influences student's experiences in the blended CR course.

Recommendations For Future Study

Recommendations for future research are based on my study results, limitations of the study, and the literature review. The first recommendation would be to continue this study with a larger participant population. This qualitative study used a small participant sample. Replicating this study with a more participants, multiple sites, and different blended programs designs would increase the degree of transferability of the study findings.

The second recommendation is related to professional development and training for teachers. The results of this study showed the importance of the teacher and student relationship. Teachers should be offered professional development and trainings designed with effective strategies and tools to increase student motivation and positive experiences while being successful in the blended CR program. Research should explore the impact that professional development has on teachers and the outcomes it has on student successes in the blended CR course. Research on effective professional development may also provide teachers with learning opportunities to better serve their students and find additional ways to influence their motivation. Professional development is also needed to ensure that states using the same program have a commonality in how the programs are run. Researchers should explore teacher training related to how teachers building relationships of trust between their students.

Lastly, the third recommendation for future study is related to the methodology. My qualitative study showed factors influence student experiences of motivation in the blended learning CR environment. A quantitative study on motivation could further

provide insight into whether student experiences are affected by characteristics such as age, gender, and number courses they are taking to determine if they are significant determinants in blended learning CR success. Additionally, research can be done on the different levels of motivation using ARCS model of motivation surveys, as they relate to those following characteristics.

Implications

This study may contribute to positive social change in several ways. Today, students across the nation are experiencing their education online due to COVID-19. This study's contribution is essential. First, at the individual level, school stakeholders, such as administrators and teachers, may gain a deeper understanding of how to better support high school at-risk students taking blended courses for CR. More specifically, administrators may be able to determine how to use budget monies for resources to provide teachers and students technology, professional development and training for teachers, and additional staff to support students who may need more classroom support.

This study's second contribution to positive social change is about providing professional development for teachers working with at-risk high school students in blended CR courses. With the growing idea of online courses being used in schools to create additional opportunities to recover missing credits, it is essential that teachers feel empowered and supported when implementing and teaching these courses. Professional development could provide teachers with the tools, strategies, and support to be more productive and supportive for students taking blended learning courses for CR. Professional development could be designed to provide teachers with best practices

focused on the importance of course designs, ways to connect and motivate students, and technology tools to increase their understanding of how to effectively navigate and use the online portion of the blended course.

The third contribution that this study makes to positive social change is at the societal level. If the motivation of at-risk students in blended CR courses can be improved, there is a potential for more students to complete the courses, therefore increasing graduation rates. More at-risk students graduating from high school may help to strengthen national, state, district graduation rates. It may also provide actual research data for at-risk student experiences in alternative school settings attempting to recover missing course credits, potentially leading to students completing courses and graduating from high school.

Conclusion

A deeper understanding of motivational factors of online high school CR courses, in terms of student experiences and teacher perspectives, in the blended learning environment, benefits all high school education stakeholders. This study provides useful information for students, teachers, and local school districts to enhance their perception of how to influence motivation and better support student experiences and outcomes in blended CR courses. This study illustrates the importance of course designs in blended CR courses, with a specific focus on motivation and at-risk high school students. Training opportunities in the form of professional development to support teachers with best practices while teaching at-risk high school students that are geared towards capturing attention, helping students find personal relevance, increasing their confidence,

and improving their satisfaction in blended CR courses. This can enhance positive experiences and successful outcomes. In addition, this study explains the importance of motivation and the influence it has on student's experiences in both the online and F2F portion of the blended CR course.

The findings from this study support the conceptual framework, Keller's ARCS model of motivation (2010), which shows that at-risk high school students' experiences in blended CR courses are influenced by attention, relevance, confidence, and satisfaction. This study suggested that motivational factors influence student experiences in online high school CR courses. Educational stakeholders may gain useful insight into the motivational factors of students taking blended high school CR courses and gain a deeper understanding of what influences their experiences and, therefore, how their educational experiences could be improved.

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Appendix A: Student Interview Questions

Student Interview Questions

IQ A: Describe your experiences in the blended CR class.

Prompt 1: What has helped you the most?

Prompt 2: What has helped you the least?

Prompt 3: How has your motivation changed in the course?

IQ B: Describe your experiences in the online portion of the blended CR course.

Prompt 1: What about the online modules motivate you most? Please describe an example.

Prompt 2: What elements about the online modules motivate you least? Please describe an example.

Prompt 3: If you could change something about the design or set up of the online modules, what would you change and why?

IQ C: Describe your experiences with the F2F portion of the blended learning CR course.

Prompt 1: What do you like about the F2F portion?

Prompt 2: What do you dislike about the F2F portion?

Prompt 3: How do you feel the F2F portion of the course influences your motivation to successfully complete the course?

Appendix B: Teacher Interview Questions

Teacher Interview Questions

IQ D: Describe any motivational issues, positive or negative that you observe your students experiencing as they take the blended CR recovery class.

Prompt 1: What do you believe has helped them the most?

Prompt 2: What do you believe has helped them the least?

IQ E: How do you believe the course design, or set up, of the online portion of the blended CR course influences student motivation to complete the course?

Prompt 1: Are there elements in the online modules that seem to motivate students? Please describe an example. (Course design could be related to how content is delivered, how they are asked to interact with content or other individuals, or it could be about the module page design, color/font etc.)

Prompt 2: Are there elements in online modules that seem to negatively impact student motivation? Please describe an example.

Prompt 3: If you could change something about the design or set up of the online modules, what would you change and why?

IQ F: In your experience how does the F2F portion of the blended learning CR course influences student motivation to complete the course?

Prompt 1: What about the F2F portion of the blended course seem to positively influence their motivation to complete the course?

Prompt 2: What about the F2F portion of the blended course seems to negatively influence their motivation to complete the course?

Appendix C: Online Course Observation Form

Name of Online Course:

Name of Online Module/Lesson for review:

Stated Objectives of the Module/Lesson:

Pseudonym(s) of student participants who have complete this module:

General Notes about look and navigation of the online module.

	Evidence of Instructional Design	Evidence of Instructional Design
Attention		
• Active Participation		
• Humor		
• Conflict		
• Variety		
• Real World Examples		
• Challenging Questions		
• Curiosity		
Relevance		
• Link to previous experience		
• Perceived present worth		
• Perceived future usefulness		
• Modeling		
• Choice		
•		
Confidence		
• Facilitate self growth		
• Communicate objectives and prerequisites		
• Provide feedback		
• Give learners control		
Satisfaction		
• Praise or rewards		
• Immediate application		
• Consistent Standards		

Appendix D: Classroom Observation Form

Date of Observation:

# of students in the room:

Pseudonym(s) of student participants present at time of observation:

Purpose of the class:

	<u>Attention</u>	<u>Relevance</u>	<u>Confidence</u>	<u>Satisfaction</u>

<u>Physical Setting</u>

--*Use of Space*

--*Instructional Resources*

--*Technology*

<u>Participants</u>

--*Number of students and adults*

--*Gender*

--*Roles of participants*

<u>Instructional Activities</u>

--*Lesson objectives*

--*Instructional strategies*

--*Assessments*

Researcher

Reflections

<u>Conversations</u>

--*Student to teacher*

--*Student to student*

--*Teacher to teacher*

<u>Subtle Factors</u>

--*Unplanned or informal activities*

 --*Nonverbal communication*

--*Connotative words*

<u>Researcher Behavior</u>

--*Location in the classroom*

--*Assumed role during the observation*

--*Other*

	Student Behaviors/Comments	Teacher Behaviors/Comments
Attention		
• Capture Interest		
• Stimulate Curiosity		
Relevance		
• Meet Personal Needs		
• Perceived Worth		

Confidence

- Feeling of
  Success
- Control of
  Success

Satisfaction

- Rewards-Internal
- Rewards-External