Collaborative Partnerships Between Community Colleges and High Schools

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Concordia University–Portland

College of Education

Doctorate of Education Program

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Collaborative Partnerships Between Community Colleges and High Schools

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Abstract

A key concern in education today is the overwhelming number of students who leave high school unprepared for college in the core courses of English and math. More and more students are entering college having to take developmental courses. A high number of those students are students in the state of Mississippi. The purpose of this qualitative case study was to explore how educational stakeholders perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi. The researcher used Tinto’s (1993) theory of integration and retention, Astin’s (1993) theory of student involvement, and Bandura’s (1993) theory of self-efficacy to outline the conceptual framework that supported the assumption that educators would perceive that a collaborative means for remedial and developmental education prior to high school graduation will result in a positive and significant impact on student college success. The study consisted of 20 educators from three high schools and two community college branches in urban Mississippi. The researcher conducted research using three data collection tools: Phase I Qualtrics Survey, Phase II Face-to-Face Interviews, and Phase III Focus Group Sessions. The results of the study indicated that the educators perceived the need for identification and intervention early in students’ academic careers in order to reduce college unpreparedness. The findings also indicated the need for a revamping of high school curriculums to mirror college expectations and closer collaboration between the institutions to reduce the number of students who graduate underprepared.

Keywords: assessments, basic skills, collaboration, college readiness, developmental education, implementation, intervention, remediation
Dedication

This venture in my life has been a God ordained venture. For that reason, I must give glory to Him- first- because he is the head of my life. Without him, I can and could do nothing! This is his doing, not mine, and I believe that it is marvelous in his sight.

I would also like to thank my parents, Willie Mae and Jeff Hayes, who listened to God’s voice and took a six-week old little girl into their care, who loved her and nurtured her, who introduced her to God, who encouraged her and instilled in her a love and a thirst for knowledge, who always believed that she could do whatever she put her mind to do, and who have remained her inspiration, even though they are now with the Lord.

I would like to thank and to give all my love to my husband, Emanuel “Noel” Godfrey, who is the love of my life. He has always been by my side. He has been my encourager during the dark times when I thought I could not make it to the end. He has been my cheerleader during my times of triumph. He has been my constant reminder that “I can do all things through Christ who strengthens me.”

Lastly, I would also like to give thanks to my children: James, Joseph, Meghan, Ian, Joshua, and Gabrielle. They have been my joy and my happiness through it all. They have encouraged me to keep going. Being their mother has been my greatest reward. I pray that through my perseverance they can find the example by which to live.

To all those who follow after me, remember that God’s “Yeah!” is “Amen!”
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I would like to give thanks to the administrators, counselors, and teachers who took part in this study. Without your patience, support, and input, this study would not have been completed. I must give special thanks to my own high school’s administrative team and my co-workers, the teachers on the English hall. Your daily support of me and of my drive to complete this study over the last three years has been incredible. You are truly my “family” and I love and respect you all.

I would like to give thanks to my sisters and brothers, to my church family, and to my friends. All of you have had my back through this process. I thank you for all of your prayers and all of your moral support.

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Chapter 1: Introduction

The number of students who leave high school unprepared for college has increased within the last decade (Thompson, 2014). Statistics show that nationally, in the academic school term 2003–2004, an estimated 48% of the students beginning public 2-year colleges and 18% of students beginning 4-year colleges took two or more remedial courses (Chen, 2016). In the academic term 2014–2015, in the state of Mississippi alone, 59% of the students who enrolled in 2-year colleges were enrolled in one or more remedial courses (Butrymowicz, 2017). This continued rise of student unpreparedness at the time of high school graduation can be seen primarily in the core curriculum subjects of English and math (King, 2016). Students who graduate from high school with academic core deficiencies often enter colleges having to take developmental courses in these core curriculum subjects (Bautsch, 2013).

Many of the students who enter these developmental course tracts are either delayed in completing their college program, or they never successfully complete the academic coursework necessary to obtain their degree (Herman, Scanlan, & Carreon, 2017). Although the nation has seen an alarming rise in the number of students underprepared for college during the last decade, the state of Mississippi has steadily fallen below the nation’s average of students who met or surpassed college readiness benchmarks in the core courses of English, math, and reading (House, Pennington, & Qualls, 2008). The purpose of this qualitative study was to explore the perceptions of educational stakeholders at selected community college branches and high schools in urban Mississippi. These educators reflected on their perception of the need for implementation of college preparedness and developmental education courses for students who have academic developmental deficiencies in high school. This chapter is organized in the following order: brief background and history of developmental education in the nation and the state of Mississippi; the conceptual framework used to address the problem; the statement of the problem; the statement of
the purpose of the study; the research question; the significance of the study; the definitions of
terms; the assumptions, delimitations, and limitations of the study, and the summary.

**Background, Context, and History of the Study**

Having to develop courses to help students who have academic deficiencies is not a new concept in the field of higher education (Fogel, 2012). The need to implement developmental courses for students in need of remediation in college and university courses can be traced back in higher education as far back as the early 19th century (Fogel, 2012). In the late 1960s and early 1970s, higher education saw an influx of students with diverse educational backgrounds because of desegregation and the GI Bill (The History of Open Admissions and Remedial Education at the City University of New York, n.d.). To answer the need for academic interventions for the students who came with academic deficiencies, in 1969 City University in New York initiated open admissions by the implementation of pre-freshman summer programs, basic skills workshops, tutoring programs, and language immersion programs (Ritze, 2005). Each of these programs, however, was implemented after students graduated high school and prior to college enrollment.

With the rise of more and more students entering college with academic deficiencies, it became a priority of 2-year community colleges across the country to not only provide vocational education programs and adult education programs, but to also provide essential postsecondary remediation and developmental courses (The History of Open Admissions and Remedial Education at the City University of New York, n.d.). According to Adelman (2006) and McClure (2011), 4-year colleges and universities in recent years shifted the burden of program redesigns and developmental education to the 2-year community colleges. Although this shift became prevalent in higher education, a common question in education became whether or not the solution for developmental and remedial education should rest with the 2-year community colleges or
should the remedy be sought prior to student’s graduation from high school (Brothen & Wambach, 2012).

The call to recognize the gap that exists between high school graduation requirements and student college readiness is one that has sounded across the country (Center for Community College Student Engagement, 2016). In the state of Mississippi, for example, the Annual Conference Report for The Mississippi Association of Developmental Educators reported that Mississippi’s high school graduates fell 18% below the national average of students who left high school, college ready (House et al., 2008). Because of this, Mississippi higher education saw the need to initiate mandatory student placement and scheduling for developmental courses in each academic session at the community college level (House et al., 2008). Thirteen developmental courses were added to the community college and junior college curriculum in the areas of Fundamental Mathematics, Beginning and Intermediate Algebra, Beginning and Intermediate English, Reading Comprehension I, II, & III, Basic Communications, Foundations of Health, and Life Learning Skills I & II (House et al., 2008). Some Mississippi community colleges, as well as colleges and universities, began implementing nine-week summer development programs at the end of student’s senior year, after high school graduation. These programs were implemented to reduce the need for students entering the developmental tract once they enrolled in college (House et al., 2008).

In addition to reporting the inclusion of additional developmental courses to community college curriculums, in their report, House et al. (2008) proposed that Mississippi higher education institutions address the achievement gap by improving systems of reaching underdeveloped students. These systems included improved advising and tutoring services and with the development of improved academic, technical, and social support programs (House et al., 2008). The report also recognized the need for expanding early interventions in Mississippi education and
suggested an initiative that strengthened the collaboration between the community colleges and P-12 education (House et al., 2008).

This qualitative study allowed the researcher to explore the perceptions of educators at the community college and high school level concerning the need for implementation of college preparedness and developmental education courses for students who have developmental deficiencies prior to these students’ graduation from high school. The case study approach was appropriate for this study because it allowed the researcher to explore the perceptions of these educators from a realistic and holistic worldview (Yin, 2014).

**Statement of the Problem**

The problem that this study explored was how do educational stakeholders perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi. Educators at colleges and universities have attempted to find solutions for the growing number of students who enter college not college ready by adding more developmental courses to their curriculum (Bailey, Jeong, & Cho, 2009; Center for Community College Student Engagement, 2016). These additional developmental courses, however, have not minimized the number of students who enter college with academic deficits in English and math. Instead, these additional developmental courses only seem to create additional “barriers to student progress that outweigh the benefits of the additional learning that might accrue” (Bailey et al., 2009, p. 13). Herman et al. (2017) suggested that a major concern in postsecondary education concerning developmental tract courses is that students enrolled in them are at risk from the very start of their academic career. Complete College America (2012) noted that “nearly 4 in 10 remedial students in community colleges never complete their remedial courses” (p. 2). In developmental programs such as the ones implemented by the Mississippi Community Colleges, the students who are enrolled in these courses have less
of a chance to complete their programs of study than those who enter college on the academic
degree tract (House et al., 2008).

The Mississippi Economic Policy Committee (MEPC; 2012) data from the fall of
2011 indicated that over 22,000 high school students entered Mississippi colleges and universities-unprepared for college course work. This was about 52% of Mississippi’s high school graduates. These students had to enroll in one or more developmental courses. The committee also reported that only 13% of these underprepared high school students were projected to complete their program of study and obtain a degree (MEPC, 2012). Recent studies showed that on the average as of 2017, 59% of students who graduate from Mississippi high schools had to take one or more remedial or developmental course (Mader, 2017). The growing statistics on students who need remedial and developmental courses in college warranted that there was a gap between high school curriculum and graduation standards and postsecondary academic needs (Barnett et al., 2012a). The statistics also indicated that something must be done earlier in a student’s academic career to prevent this gap in order to ensure college readiness and success to all students. Limited studies have been done to determine how postsecondary and secondary school stakeholders perceive this problem. This study provided insight into the perceptions of key stakeholders into ways to collaboratively bridge the gap between community colleges and high schools concerning developmental courses and student academic deficiencies.

**Purpose of the Study**

This study explored how educational stakeholders perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi. The study provided an opportunity for these stakeholders to express their views on the question of student academic deficiencies at the secondary and postsecondary level in core courses. The study also allowed these stakeholders to
explore their understanding of the gap that exists between high school requirements and college readiness indicators. The study provided information on how these educators perceive the need for change within their institutions and in the manner in which these problems were currently being addressed. Finally, the study provided information on ways to implement collaborative college preparedness and education courses to meet student needs.

Research Question

The research question that guided this study explored the perception of secondary and postsecondary educators concerning how to meet students’ needs. The question that the researcher sought to answer through this study was:

RQ. How do educational stakeholders perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi?

Rationale, Relevance, and Significance of the Study

The researcher used a qualitative approach to answer the research question. Stake (2010) and Yin (2014) each determined that the qualitative approach allows the researcher to discover emerging ideas through the lens of a social constructivist worldview. With this world-view, the participants in the study were allowed the flexibility and freedom of constructing meaning from existing conditions and circumstances. By allowing participants to interact and explore their perceptions, within the context of this qualitative approach, the researcher was allowed to play an investigative role (McMillan, 2012). This investigative role allowed the participants to reveal their perspectives openly and honestly, and it allowed the researcher to discover these perspectives through the active role of the collection and analysis process (Yin, 2014).

This study utilized the single case study strategy of inquiry. This approach was appropriate because the participants shared their perspectives as they related to the real-life experiences of the
participants of this study (Creswell, 2013). The data collected in this study was triangulated using the following methods: questionnaires, interviews, and focus groups. When collected data was looked at from two or more data collection methods, the researcher developed a deeper understanding of the participant’s perspectives and experiences (Flick, Kardoff, & Steinke, 2004; McMillan, 2012; Yeasmin & Rahmann, 2012). Although this study was limited to four branches of a Mississippi community college and four urban high schools in Central Mississippi, this qualitative case study was generalizable for other teachers in Mississippi high schools and community colleges that were facing the same increasing number of students who were unprepared for college level coursework. This study was both significant and relevant because it offered an acceptable paradigm to explore the perceptions of educators who have an active role in Mississippi postsecondary and secondary education in regard to their understanding of their institutions roles in meeting the needs of student with academic deficiencies, and their perceptions of ways of implementing courses to meet the needs of these students.

**Definition of Terms**

*Attrition*: Attrition referred to the withdrawal of students from diploma/certificate or applied degree programs prior to completion (Mazzariello, Ganga, & Edgecombe, 2018).

*Bridge Programs*: Bridge programs were designed to reduce the need for developmental education in college by providing students with accelerated instruction in areas where additional knowledge and skills are needed to help them succeed in higher education. These programs occur in the summer “bridge” period between high school and college (Institution of Education Sciences, 2015).

*College Readiness*: College readiness is determined by the initial placement of students in credit bearing English or Math courses as a common indicator of college readiness. Students who
are not considered college ready are placed in Developmental English or Math Courses. College entry test scores or college placement tests usually determine placement (Conley, 2012).

*Credit-Bearing Courses:* Credit-bearing courses are college level courses for which students that receive passing grades earn credit towards a degree (Herman et al., 2017).

*Developmental Courses:* Developmental courses are courses designed to prepare students who are not college ready for college-level credit bearing courses. These courses are also referred to as remedial courses (Bettinger, Boatman, & Long, 2013).

*Developmental Education:* Developmental education is defined as those courses and curriculum programs designed to assist students who are not prepared for college level coursework; developmental education consists of not only courses but also includes tutoring, academic counseling and advising, and social interventions. It includes courses and services that help to retain students and enhance their chances for academic success and graduation (Boylan & Bonham, 2007).

*Developmental Education Courses:* Developmental education courses are usually courses taken on the college level in English, math, and reading that do not apply to any degree credits, but that instead are designed to enhance the academic success of students and underprepared for college level coursework (Daiek, Dixon, & Talbert, 2012).

*Dual Credit Courses:* Dual credit courses are courses that allow students to enroll in separate but academically related institutions of learning; usually refers to academically advanced high school students taking college courses; many administrators now use these courses as a way to bridge the gap between academic preparedness and postsecondary expectation to reduce the need for remedial courses in college (Stringfield, Shumer, Stipanovic, & Murphy, 2013).

*Linked Learning Communities:* Linked Learning Communities in postsecondary education are an alternative method to developmental learning; these programs are defined by their having
social and curricular linkages that provide undergraduate students with intentional integration on themes and concepts that they are learning (Inkelas & Soldner, 2011).

Placement Tests: Educational records will contain placement data from tests such as Asset, Accuplacer, Compass, and other placement tests brands. These tests provide validity for student placement in either credit-bearing college-level courses or non-credit bearing developmental courses. The tests measure college readiness content in reading comprehension, writing, sentence structure, and basic math and science skills (Bautsch, 2013).

Remedial Education: Remedial education refers to classes taken on a college campus by students who need remediation or developmental help in the core courses of Reading, Math, and English. The term can be used interchangeably with developmental education or basic skills coursework (Bautsch, 2013).

Student Outcomes: Student outcomes can be defined as the desired learning goals or objectives that students are expected to achieve by teachers and schools, or they are defined as the actual results of the student learning experience (Glossary of Education Reform, 2013).

Summer Bridge Programs: Summer Bridge programs are programs aimed at providing alternatives to traditional developmental education by providing accelerated and focused learning opportunities over the summer prior to college entry (Barnett et al., 2012a).

Assumptions, Limitations, and Delimitations

In this study, the researcher sought to determine any assumptions, limitations, and delimitations that might be encountered in this study. The key assumptions, limitations, and delimitations are identified in this section.

Five assumptions made concerning this study:

1. The researcher assumed that all persons contacted for the study agreed to be a part of the study.
2. The researcher assumed that each participant would answer all survey, interview, and focus group discussion questions honestly and forthrightly without bias, fear of repercussions, or sense of obligation.

3. The researcher assumed that during the focus group, the participants would hold the details of other participant’s comments in confidence. Participants would also be aware of their rights to confidential disclosure and their rights to withdraw from the study at any time without penalty or fear of negative feedback.

4. It was also assumed that the researcher would listen to, record, transcribe, and make available any written transcripts to the participant. Participants at that time would review, respond to, or clarify these written transcripts.

5. It was assumed that the research design being used was the most appropriate for the study.

Three limitations identified in this study:

1. The first limitation identified was sample size. This study was initially limited to 24 educators who were selected through the convenience sampling method. These educators were selected from four branches of a Mississippi Community College and four urban High Schools. The total number of educators represented was initially to be 12 from the colleges and 12 from the high schools; however, the total number of participants was reduced to 20. The high school participants included 11 members, and the community college participants were nine. These educators were representative of administrators, teachers, and counselors in these educational institutions. This number was small, which limited the scope of the study. However, the depth and quality of the responses outweigh the logistics of quantity. The goal of the study was to explore the perceptions of these educators in regard to the need for implementation of college
preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi. These educators qualified as perceptive representatives.

2. The second limitation of the study was the generalizability of the specific local of the study (Creswell, 2013). This study was limited finally limited to 2 branches of a community college and 3 urban high schools in Mississippi because of availability. Therefore, the findings of this study may not be applicable to the perceptions of all educators at community colleges, 4-year colleges, or high schools in Mississippi or in the country at large. In addition, generalization was not the purpose of qualitative research.

3. The third limitation considered in this study was the perspective of the researcher in regard to the interpretation of data from two of the community colleges and one of the high schools of the study. The participant’s teaching history at these institutions may have introduced researcher bias. For the transcription and coding of data collected from participants from these institutions, an outside person may have been feasible.

Delimitations that the researcher has direct control included:

1. The researcher determined that only faculty, administration, and counselors who were involved in developmental education on the college level and those involved in general high school level classes would be considered for the study. For example, the study excluded high school teachers who taught advanced placement classes or honor level courses.

2. The researcher selected and implemented the survey, interview, and focus group questions that were asked.

3. The researcher limited focus-group time to 1 hour and interview time to 45 minutes.
4. The researcher reserved a list of possible participants for the study in case participants choose to withdraw from the study to maintain a minimum of 20 to 24 participants total.

**Chapter 1 Summary**

According to the Center for Community College Self Engagement or CCCSE (2016), two-thirds of the students who leave high school in this country are underprepared when they enter post-secondary institutions. In order to accommodate the high number of students who enter 4-year colleges and community colleges unprepared, these higher education institutions have redesigned developmental education and core curriculums, instituted accelerated classes, and offered alternative gateways to learning (CCCSE, 2016). The obvious disconnect between high school graduation requirements and college readiness can be acknowledged when noting that 68% of the students in the nation’s community colleges require one or more developmental courses (CCCSE, 2016).

This chapter outlined the history of developmental education and the state of developmental education in the state of Mississippi. It also noted that limited research has been done on the perceptions of educators on the implementation of college preparedness and developmental education courses for students with developmental deficiencies prior to high school graduation. It, therefore, notes that due to this limited research on this topic, this study proved beneficial to both postsecondary and secondary educators.

The chapter outlined a qualitative single case study that explored how educational stakeholders perceive the implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi. The chapter also defined terms used throughout the study. In addition, it identified the assumptions, limitations, and delimitations of the study.
Chapter 2: Literature Review

Introduction to Review

Chapter 2 provides a synthesis of supporting literature on the topic of developmental and remedial education. This chapter includes three sections: background to the research problem, a relevant literature review applicable to the research topic, and a synthesized summary of the key strategic points for this study based upon the current research literature. To conduct this research, the researcher performed a series of literature searches using specific keywords to gather relevant empirical articles and studies.

The introduction of Chapter 2 reveals the background information about the research problem. In addition, the introduction describes the problem concerning the growing gap between students who leave high school and enter college unprepared for college level coursework, especially in math and English. The literature presented represents the major approaches implemented within community colleges across the country and their attempts to address the issue. The approaches identified in this review offer a look into intentional program options that aim at improving student learning and student perception of developmental courses and materials. In addition, the literature focuses on examining to what extent these approaches and developmental programs impact student retention, persistence, success, and outcomes. The literature selected also serves to inform the theoretical and the empirical focus of this study, and it lays the foundation for the argument that this study is necessary to offer additional knowledge concerning a future direction for developmental education, its policies and practices in the state of Mississippi and perhaps nationally. The chapter includes an introduction to the chapter, the background of the problem, the theoretical framework, and the review of the literature.

The literature used in this study was sourced from databases such as ProQuest Central, JSTOR, and ERIC using key words that were relevant to the study. The key words include words
such as attrition, bridge programs, college readiness, collaboration, developmental courses, developmental education, developmental education courses, dual credit courses, K–12 and postsecondary partnerships, learning communities, perception, remedial education, student outcomes, tutoring, and others.

**Background to the Problem**

A key concern in education today is the overwhelming number of students who leave high school unprepared for college in the core courses of English and math. In 2013, 42% of the students entering community colleges were not sufficiently prepared for college level English and Math courses, and studies reported that most of those students took one or more developmental course (Thompson, 2014). Of these students, less than 25% continued to complete their college program with either a degree or a certificate of completion (Thompson, 2014). As a result of the continual rise in student unpreparedness, more students are entering college having to take developmental courses. King (2016) noted that either these students were unable to meet college requirements as a result of their ACT scores, or they made below the acceptable score on college entry exams such as ACCUPLACER and COMPASS. These exams and placement tests were designed to identify student deficiencies in specific areas but have been used as college placement instruments (King, 2016). According to Bautsch (2013), developmental courses are defined as those courses, which are taken in college by the students that fall below college level and who cannot be placed in the gateway courses that would lead them on to graduation. Fulton, Giannesschi, Blanco, and DeMaria (2014) determined that not only has concern grown because of the large number of students who leave high school unprepared in the core courses of English and Math, but also there is concern over the increasing costs for higher education institutions once these students enter college taking the developmental courses.
Higher education institutions are faced with the high costs of maintaining the large number of developmental courses being added to their curriculums. These institutions are also faced with a decrease in retention and graduation rates for these students who enter college unprepared (Fulton et al., 2014). Statistics show that in the academic school year of 2007–2008 alone, 1.7 million students who entered college in the United States for the first time were enrolled in at least one developmental course, and the cost of those courses were well over $3 billion dollars (Fulton et al., 2014; Alliance for Excellent Education, 2011). It was calculated that, at a 2-year college alone, if 42% of the first-time freshman were enrolled in at least one developmental education course, $1.96 billion is spent (Pretlow, 2011).

These developmental courses were identified as non-credit bearing courses; therefore, many of the students who are enrolled in them spend their academic class time attempting to obtain skills and mindsets that they somehow missed in their previous educational experience. Many of these students took more than the estimated time to pass the courses and either ran out of financial aid opportunities because of repeated class failures, or they just became frustrated and gave up (Fulton et al., 2014). According to Herman et al. (2017), in their study concerning college enrollment and academic outcomes of the first-time freshmen seeking an associate’s degree at Northern Marianas College, 80% were placed in developmental English courses and 91% were placed in developmental Math courses.

Their study showed that these students had worse academic outcomes when compared to the students who entered college-college ready and who were placed in academic track English and Math courses. The study tracked these developmental students for eight semesters between 2008 and 2010, and it was discovered that the retention and graduation rates for these developmental students were extremely low when compared to the students placed in regular academic track classes. The study revealed that after the second semester, only 39% of the
developmental English students and 30% of the developmental Math students advanced to credit bearing courses (Herman et al., 2017, p. 8). By the third semester, only 47% of the developmental English students and only 56% of the Math students were still enrolled in college, and by graduation in semester eight of college, only 9% of the students placed in developmental English courses and 14% of those students placed in developmental Math courses graduated from Northern Marianas College (Herman et al., 2017, p. 12). These statistics are not isolated to just Northern Marianas College; they are echoed across the United States.

Adding developmental programs to the college curriculum is meant to help students who enter college unprepared. Instead of helping them, however, studies like the one at Northern Marianas College show that these programs are not working. The majority of the students placed in these programs do not graduate from college because they either do not advance to the credit bearing courses of English and Math, or they drop out of college after drowning in the repetition of taking these courses over and over again. The purpose of this study will be to explore developmental education in Mississippi. House et al. (2008) noted in their annual conference report and assessment of the needs for Mississippi’s developmental programs that the national statistics for developmental courses recognized that developmental education programs on college campuses were “reducing degree completion rates and student transfer probabilities; lowering student self-esteem and student and faculty expectations; and diminishing the prestige of degrees offered by community and junior colleges” (p. 10). In addition, they noted that nationally, there was a call to recognize that responsibility for the gap in college readiness should fall back on the K–12 educational system. According to ACT (2017), Mississippi fell far below the nation’s average of students who met or surpassed the ACT’s college readiness benchmarks in the core courses of Math, Reading, and Science for the academic term 2017; the national average was 27%, while Mississippi’s average was only 12% (para. 5). As a result of these percentages, Mississippi
saw not only a rise in the number of students enrolling in developmental courses in the states' community colleges, but Mississippi also saw an increase in the need for mandatory student placement and scheduling for developmental courses in community colleges and junior colleges in fall, winter, spring, and summer of the academic year.

House et al. (2008) stated that because of the statistical drop in Mississippi’s student’s college readiness thirteen developmental courses were added to the community and junior college curriculum, which included Fundamentals of Mathematics, Beginning Algebra, Intermediate Algebra, Beginning English, Intermediate English, Reading Comprehension I, II, & III, Basic Speaking, Communications Skills, Foundations of Health, Life Learning Skills I and Life Learning Skills II (pp. 22–23). This entire developmental program was designed for students to complete before they ever advanced to a degree track course curriculum. A major concern in postsecondary education is that the students who are enrolled in these programs are at risk from the very start of their college career and have a far less chance of earning a degree or a certificate than the students who enter college on the degree track. The increase in the number of students who enter Mississippi community colleges was also documented by The Mississippi Economic Policy Committee (MEPC; 2012). MEPC (2012) reported that in the fall of 2011, over 22,000 high school students entered Mississippi colleges not college ready and had to enroll in one or more developmental or remedial course. This study indicated that 52% of Mississippi’s high school graduates and first-time full-time community college students were not prepared for college coursework, and the study confirmed that of that 52% only 13% will actually continue their college career to attain a degree. Of that 13%, most would complete a 2-year degree within a three- to a five-year period (MEPC, 2012). The facts indicated in both of these reports show evidence that Mississippi’s developmental students must be caught prior to college entry, and the
gap in their achievement level must be bridged and somehow rectified so that their chances of success can change.

To find solutions for the growing number of students who enter college not ready, colleges and universities have tried to add more developmental courses to their curriculums. The number of students taking these courses and who are not successful in their college experience is steadily on the rise. Various studies indicate that traditional developmental programs are not improving student success or student outcomes. Bailey et al. (2009) suggested that “the developmental education obstacle course creates barriers to student progress that outweigh the benefits of the additional learning that might accrue to those who enroll in remediation” (p. 13). Adelman (2006) and McClure (2011) each agreed that fewer and fewer 4-year colleges and universities are offering remedial programs and that the majority of the students needing remedial help are enrolling in 2-year community college. Since the shift of developmental programs falls primarily into the hands of the 2-year community colleges rather than the universities and 4-year colleges, the burden of the responsibility for program design and student outcome also falls to the community colleges (Adelman, 2006; McClure, 2011). With this shift, it is imperative to remember that although the community colleges accept the initial responsibility for these students, the academic problems and deficiencies that these students bring with them began long before college entry.

In the search for ways to deal with the issue, higher education has produced many strategies and theories; however, the issue has found no remedy. Brothen and Wambach (2012) pondered the big question of whether educational institutions were offering the right solutions to the dilemma that developmental education presents (p. 34). By limiting this study’s focus to the developmental education in four Mississippi 2-year community college campuses and 4 high schools, the researcher sought to explore remedial and developmental courses as they related to Mississippi’s postsecondary and secondary education programs. The researcher also sought to
explore, through the lens of educators, the areas of student and program deficiencies in secondary education that build the gap between college readiness and the lack of preparedness for high school graduates.

The majority of the students who enter Mississippi 2-year community colleges unprepared are not exceptional education students, ESL students, or students who have IEPs (MEPC, 2012). Instead, they are regular education students who (based on high school credits and GPA’s) have the potential to graduate from high school, who desire to go to college, either a 2-year college or beyond, but who cannot meet college-level course requirements in the core subjects of English and Math on college entrance exams of the ACT. The study put emphasis on understanding the perceptions of major stakeholders at the postsecondary and the secondary level on the need for implementing college preparedness and developmental courses at the high school level. Implementation of these courses will allow students with developmental deficiencies in these core courses to enroll in elective developmental and remedial courses during their 9-12 secondary experience.

An indicator of the growing gap that exists between what students leave high school knowing and what they need to know is the growing number of high school students who fail college entrance exams and placement tests and must be placed in developmental programs. According to Lewis (2015), community colleges have the unique capability to address the issue of remediation and developmental education. This is possible because of their “open door policy” and their willingness to extend an opportunity to every student who enrolls (regardless of college entrance scores or their academic capabilities) to pursue a college education. Because of the mandate placed on community colleges by this policy, the increasing number of underprepared students demands that greater emphasis is placed on developmental education curriculums, programs, teachers, staff, and policy of the postsecondary level. Emphasis is also placed on the
search for additional means of ensuring student retention and success. Lewis (2015) noted that many community college administrators place specific focus on “making the educational processes and programs a function of the faculty, counselors, and especially administrators; however, not all institutions are in favor of developmental education being offered at the community college level (p. 3). Alternatives for developmental education are being determined, which include summer bridge programs, learning communities, advisory and tutorial services, early assessments, and accelerated programs. Lewis (2015) furthered that there are those who emphasize that the responsibility for developmental education and the focus on student college readiness should shift back to high school grades 9 through 12.

The problem that this study addressed was how do educational stakeholders perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi. The researcher explored this problem by examining the perceptions of education stakeholders on two campuses of a community college and three high schools in an urban area of Central Mississippi. The key focus of the study was the perceptions of these stakeholders on the implementation of college preparedness and developmental education courses at the high school level. The research question that guides this study was:

RQ. How do educational stakeholders perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi?

Conceptual Framework

In an attempt to address the growing needs of students in remedial and developmental courses, many higher education institutions are acknowledging that in order for students to be successful in their academic settings, the students must be stimulated academically. In addition to
academic stimulation, students must be involved in their learning environment and with their learning cohorts, and they must have a positive sense of self. In many of the studies dedicated to determining the success or failure of these students and the developmental programs or alternative learning options developed for them, the lens utilized has been Tinto’s (1975, 1993, 1997, 2007) retention theory. This theory identifies the need for student social and academic integration early in their learning experience.

The first component of Tinto’s retention model is academic integration. Tinto’s seminal retention model (1975) theorized that students who integrate into their learning environment both academically and socially early in their academic experience increase their commitment to the institution and are therefore more likely to successfully complete their educational opportunity. Tinto’s theory essentially framed the mission of postsecondary education as educating, supporting, and retaining students, according to Laskey and Hetzel (2011). Tinto’s model was later used to provide a predictive model for the dropout policy of college students. Pascarella and Terenzini (1980) used Tinto’s theory of social and academic integration to develop a questionnaire and a scale that could be used to explain the dropout behavior among college students. The evidence identified by Pascarella and Terenzini’s scale provided evidence for the predictive validity of the constructs of the conceptual model framed by Tinto to identify why students either persist or drop out of college. Brady (1985) expanded Tinto’s model to explain why high school students drop out of high school. Brady suggested through his study that Tinto’s (1975) model of integration coupled with Pascarella and Terenzini’s (1980) questionnaire and scale were ideal for analyzing and explaining attrition among high school students. The study provided evidence to validate the function of a student’s academic and social integration on a student’s academic success.

Finnan (1991) continued to explore the expansion of the Tinto/Brady models to explain the impact of social and academic integration on high school dropouts. Corbin (1998) sought to find
the relationship between social and academic integration in the high school setting and a student’s self-perception. The findings of this study concluded that student persistence and student academic success are directly connected to social and academic integration. The researcher also determined that Tinto’s model could be applied to high school students (Corbin, 1998, p. 33). By looking at Tinto’s theory of integration from the perspective of high school students, this study focused on the premise that if students who have academic struggles are identified and caught early on in their high school experience, they can through the combining of academic interventions and academic and social integration improve their academic performance. They can also change their personal views concerning their postsecondary directives and their abilities to be successful in high school as well as college. Daiek et al. (2012) noted that high school students who enter post-secondary institutions under-prepared shared the same deficiencies. These deficiencies included the lack of academic basic skills, the lack of directions and goals, the lack of motivation, the lack of self-confidence, and the lack of a belief in their own self-efficacy (p. 38). By initiating a collaborative effort to identify students who have basic skills needs early and by aligning student support services, student social integration strategies, and postsecondary academic requirements, high schools and colleges can afford students greater opportunity for college readiness and college success.

A second component of Tinto’s retention model is social integration (Tinto, 2004, 2007). Research indicates that a student’s interaction with teachers, administrators, and peers can promote social integration and that integration can, in turn, stimulate a student’s sense of acceptance and belonging (Lewis, 2015). Tinto’s theory supports the ideology that integration as a two-part process holds the institution responsible for creating the conditions that contribute to the student’s overall academic success. According to his theory, if the institution establishes the classroom as a learning community and creates conditions where students can be socially integrated, the students
can then become actors and interpreters of their academic situations, which can provide positive and effective results in remediation and student preparation for college level work (Lewis, 2015; Tinto, 2007). In addition, social integration within these established learning communities can promote opportunities for collaborative sharing, interacting, and learning, which promote student self-confidence and academic success (Malnarich, 2005).

Another influential and relevant theory in developmental education is Astin’s (1985, 1991, 1993, 1999) involvement theory. According to this theory, the amount of time that a student devotes, physically and psychologically, to his or her academic experience, the greater investment the student makes to that experience. Astin’s theory of student involvement assumes that student success is intricately interwoven with events that happen both within and outside of the classroom environment of a postsecondary educational institution (Lewis, 2015). The theory also maintains that in order for an academic program or policy to be effective, it must aim to increase student involvement (Astin, 1999). Student involvement, according to the theory, extends beyond academic experiences in the classroom. It involves teacher-student interaction, student-peer interactions, campus interactions, and administrator–counselor interactions. Although developed as a means for understanding the components of student success in college, Astin’s (1985) theory of involvement has great bearing on the success of students who are attempting to achieve college readiness. Astin’s theory postulates that by changing its programs and policies to facilitate student needs, student interests, and student involvements, an educational institution can positively affect student success (Lewis, 2015).

The all-in involvement of students, teachers, counselors, administrators, and parents is essential to student success and preparation for postsecondary education (Marchione, 2012). In addressing educator’s perceptions of the need for implementation of college preparedness and developmental courses on the secondary level, one of the main objectives of this study was to
understand how the major stakeholders perceive that these courses will be directed with the all-in involvement of those concerned. The study sought to explore these educator’s perceptions on the best methods of implementation of these college preparedness and developmental courses. The questions that surround the enigma of developmental education are complex and widely debated; yet, a general consensus as to the direction of change is being echoed throughout the field of higher education (Marchione, 2012). He stated,

Higher education officials can no longer ignore the essentiality of forging and sustaining strong collaborations with the K–12 systems, their important role in improving students’ preparedness for college success and degree completion, and the necessity to design comprehensive, well-organized, mission specific developmental and transitional education programs. (Marchione, 2012, p. 28)

The necessity of educator’s recognition of their roles in student academic success and college preparedness is key to the focus of this study.

Another theory that has a close connection to Tinto’s (1993) theory of involvement and student retention and Astin’s (1993) theory of integration is Bandura’s (1993) self-efficacy theory. This theory determines that a student’s belief in his or her ability to succeed can be positively influenced by his or her experiences with peers, instructors, and the environment. By building academic environments that allow students the opportunity for involvement and that allows them to find both failure and success in safe and challenging environments, the greater the opportunities for student academic growth, persistence, and success. Bandura (1993) determined that in these types of environments, students have a greater sense of self-efficacy. The theory furthered that students who believe in their success have a greater propensity to engage in behaviors that will lead to success. In co-operative learning environments that promote positive self-perceptions, students work together with their instructors and their cohorts. With these types of continuing
interactive academic and social environments, the potential for positive academic outcomes is increased.

The success of a collaborative learning environment fostered through the initiation of remedial and developmental electives ninth through 12th grade is contingent upon implementation of the principles of Tinto’s (1993) retention and social integration model, Astin’s (1993) theory of student involvement, and Bandura’s (1993) theory of self-efficacy. In order for a learning environment to be collaborative, it will be necessary for it to take on the attributes of constructivist–learning (Crawford, 2015). In this type of environment, the teacher is allowed an opportunity to re-define his or her role as the sole source of knowledge to a collaborative facilitator and partner with the students. The students, in turn, shift from passive learners to active learning members within the learning community (Crawford, 2015). The learning that occurs within this active learning community is intentional on the part of the student and his peers, and it involves self-assessment and peer-assessment, which not only facilitates learning, but that also acts as validation for learning (Crawford, 2015). In this active learning environment, students gain independence and control of their learning, which allows them an opportunity for growth and expansion of their knowledge base and that leads them to confidence in their ability to succeed (Crawford, 2015). In relating the three theories into the concept of implementing college preparedness and developmental education courses on the high school level, through a collaborative effort educators must identify the students who need help by looking at the students’ areas of weaknesses and their previous learning experiences. Then, within the context of the electives and the curriculum focus, interject the ideas of integration, involvement, and self-efficacy along with the demands of the quality and rigor of instruction and learning key to student success (Astin, 1999).
This study used Tinto’s (1993) theory of integration and retention, Astin’s (1993) theory of student involvement, and Bandura’s (1993) theory of self-efficacy to outline the conceptual framework that supported the assumption that a collaborative means for remedial and developmental education prior to high school graduation (e.g., grades 9-12) will result in a positive and significant impact on student success and retention. Figure 1 illustrates the positive impact on student outcome assumed with the use of an intertwining of integration, involvement, and collaboration. These theories were used to explore how the key stakeholders on the postsecondary and secondary level view this collaborative implementation and the probability that it will have for positive change in student college readiness.

The study first looked at the history, challenges, and reforms of developmental education. The review also offered an overview of the alternative approaches to developmental education and recent studies concerning developmental education before addressing the focus of the study itself.

This premise assumes that once students have achieved social integration and academic involvement, they will become motivated to learn with academic support. They will gain confidence in their ability to achieve, and their self-efficacy and self-confidence will lead them to academic success, high school graduation, and college readiness. These, in turn, will facilitate them being able to move through college level courses. Persistence, retention, and college graduation will be evidence of complete academic success.

Review of Literature, Methodological Literature and Synthesis of Research Findings

Developmental education programs have been designed to meet the needs of students who enter college but who are not prepared to complete college level coursework. Shaw (2014) determined that although developmental programs and courses have this initiative as the impetus of their focus, more and more students who are placed in these programs of study do not complete them. Pruett and Absher (2015) noted that first-year community college students are more likely to take one or more developmental courses once they leave high school. They also indicated that these first-year students have the highest attrition rates. This trend is not new to postsecondary education. Shaw acknowledged that developmental education as it exists today is the same as it was twenty-years ago as far as programing and classes on college campuses (p. 38). As a result of the absence of change in developmental education, students continue to enter these developmental programs failing to complete their college degrees in the traditional time frame, or they fail to complete college at all (Shaw, 2014). Less than one-fourth of the students who enter the nation’s
2-year community colleges enrolled in a developmental education program will complete their degree within 8 years of their college enrollment (Bailey, Jeong, & Cho, 2010). With the rising number of students entering college unprepared and the extensive statistical data concerning the number of students placed in the developmental track who fail to succeed in postsecondary, education leaders and researchers are searching for answers to the dilemmas of developmental education.

This literature review addresses the issues of developmental education and the variety of ways researchers have attempted to find answers to these issues. Review of existing literature determines that there is an underlying plea for a bridge to be made between K–12 and postsecondary institutions to meet the needs of underprepared students before they leave high school and before they enter college. The limited amount of research found during the literature review process on the specifics of K–12 and postsecondary collaboration in the area of developmental education further demonstrates a need for additional research to add to existing knowledge.

**The general state of developmental education.** An issue in developmental education that is ongoing is the question concerning the effectiveness of community colleges in addressing the needs of the growing number of students who enter college unprepared. In their paper, Goudas and Boylan (2012) examined the conflicting data concerning the state of developmental education and its effectiveness. They determined in their report that developmental education and its goals have been miss-defined, and once these goals have been redefined then and only then will a re-evaluation of its success be identified. One miss-conception that is addressed in this report came from a study by Martorell and McFarlin (2007). In their study, these researchers assumed that because a student takes one or more remedial courses then that student is destined to do better in credit bearing courses than non-developmental students. Goudas and Boylan (2012) discovered
that students who took remedial courses did not do better in college courses when compared to non-developmental students; therefore, they determined that developmental education courses were ineffective. In addressing the validity of remedial course successes, Vedder (2012) commented, “remedial courses as they presently stand, are a silent contract for fraud” (p. 2). As a result of this rather than perpetuating a system that does not work, Goudas and Boylan concluded that a key to meeting the needs of underprepared students is to “meet them where they are academically” and to allow them to begin their postsecondary education on equal ground with the students who do not need remediation (p. 3). These opportunities are best offered, according to Goudas and Boylan (2012) before students enter college. There are indications from these studies that alternatives to developmental education are necessary to ease the gap between college course expectations and in-coming student readiness.

Changes must be made in developmental educational programs to promote student academic success. Neuburger, Goosen, and Barry (2013) determined in their report that in order for developmental education programs to be effective, there must be several important connections made. These connections include educator driven programs and student-centered policy and practice, with the students as the center of the connections. Barnett and Hughes (2010) identified the historically close connection between community colleges and high school and surmised that this connection could lead to the development of more effective methods of improving the academic success of students in need of remediation. Researchers noted that in addition to collaborative connections, strong coordination is of vital importance to effective programs and to the success of Developmental Education (DE) students (Bailey et al., 2010; Barnett & Hughes, 2010; Neuburger et al., 2013). The coordination requires collective and collaborative practice and implementation of program directives from all stakeholders in order to reinforce program goals. Neuburger et al. also recognized that educators are major stakeholders in the issue of
developmental education (p. 73). Edgecombe, Jaggars, Baker, and Bailey (2013) echoed this same determination and noted the importance of strengthening both teaching and learning in developmental education programs. This is done by providing educators with faculty development programs that will strengthen their means of establishing supportive and collaborative practices to address the needs of students in need of remediation (Edgecombe et al., 2013). The researchers also determined that as major stakeholders, educators must have a voice in the policy-making decisions that affect the changes in developmental education teaching and practices (Neuburger et al., 2013). Alternatives to traditional approaches to DE should be incorporated into the collaborative equation to ensure success in DE student’s outcomes (Neuburger et al., 2013, p. 73). By examining the traditional and alternative approaches to developmental education that have previously implemented, it should be possible for educators to identify new methods and approaches to the problem that are apparent in the programs as they exist today.

Taking a closer look at the strategies implemented to address the problems identified in developmental education provides a better understanding of the issues that undergird developmental education. Bautsch (2013) gave an overview of the state of remedial and developmental education. According to her, only 25% of the students in the United States who took the ACT in 2012 met test readiness benchmarks in the core subjects English, math, reading, and science. She also noted that this lack of test readiness has a direct bearing on the lack of a student’s college readiness. It also has a direct impact on the cost of remediation for both students and the states (p. 2). Complete College America (2012) documented that remedial and developmental costs exceed $3 billion each year. As a result of the high costs of developmental and remedial education, Bautsch (2013) identified preventive strategies that can be implemented to offset these high costs. One suggestion that was offered in the report was based on California’s Early Assessment Program, which allowed students to take college readiness tests in their junior
year of high school (p. 2). If students fell short of college readiness standards, they could take remedial course work in their senior year of high school to change their college readiness trajectory.

In addition to EAP, Bautsch (2013) identified other alternatives for developmental and remedial academic support. These alternatives included accelerated courses, learning communities, and course redesign. In their assessment of the many strategies and alternatives noted to improve developmental education programs, Schak, Metzger, Bass, McCann, and English (2017) determined that more exploration and research is needed to guide stakeholders in their efforts to determine which strategy works. They suggested, however, that one of the most important deterrents of the excessive costs and time of developmental and re-medial education is the reduction of the need for these courses on the postsecondary level (p. 10). According to them, a collaboration between postsecondary and secondary schools and communities provides a way to better inform, access, and pre-pare at risk students for college (Schak et al., 2017). In order for changes to occur in developmental programs and policy, more data must be collected to determine the most effective ways to address a collaborative effort to remedy the issues associated with the remediation of students.

One of the key detriments to student retention and academic success in developmental education programs is the design of the programs, which can act as a roadblock to student academic success. Less than 25% of developmental students in the community college setting earn a certificate or degree within eight years (Bailey et al., 2010; Bautsch, 2013). In their study, Brothen and Wambach (2012) determined that integrating developmental education with college level curriculum might help underprepared students in retention, success, and academic outcomes (p. 36). In their review of previous research, they noted that the underlying focus of developmental education is remediation; however, the question of whether developmental
education is effective in its present state was a repeated question in educational research. The researchers’ review revealed that the argument for developmental courses as a form of remediation in colleges loses ground when comparing the pass rate percentage of those who take and complete developmental courses to those who do not complete developmental courses. Edgecombe (2011) suggested that in order to address the issues identified in traditional developmental course designs, students should be allowed to register in more than one sequential course per semester. By doing so, students have a greater potential to continue to the next course, and academic persistence and success will be more likely.

Brothen and Wambach (2012) found that continuation in developmental sequences in postsecondary education does not advance students towards higher degrees. These reviewers contended that the goal of developmental education should be to not only prepare underprepared students for college-level course work; it should also move them towards persistence and successful outcomes in their academic goals (p. 35). Complete College America (2012) proposed that when students are forced by program designs to complete “prerequisite hurdles before getting to college level courses”, they are not only delayed in their academic progress, but they are also hindered in committing to their own academic success (p. 11). One study recommended that community colleges mainstream developmental students into college level courses rather than traditional developmental track courses. These courses would co-exist with embedded support, intensified instruction, and an overhauled placement system (Complete College America, 2012). The poor outcomes of current remedial and developmental programs are a frequently noted argument for mainstreaming students into college level courses (Hayward & Willet, 2014; Hern, 2012).

Reviews of the issues found with developmental education have led the researchers to offer alternatives to developmental education. The alternatives included adding supplementary
instruction across the curriculum at the college level, using accelerated learning as an option to
traditional learning methods in developmental programs, allowing for alternative placement
methods, and integrating developmental education into mainstream education, integrating skills
learning with developmental education (Brothen & Wambach, 2012). Another essential alternative
suggested was opening the door for collaboration between secondary institutions in order to
identify and reduce the number of students entering college underprepared (Brothen & Wambach,
2012, p. 36). This collaborative effort may well serve to strengthen high school preparation and
possibly provide consistent and positive outcomes for students previously identified as
underprepared.

The idea of consistency in addressing the problem of developmental education continues to
be an issue in education at the post-secondary and secondary levels. Marchione (2012) reported
that for many higher education institutions, developmental and remedial programs have proven to
be ineffective in promoting consistent outcomes for students and in advancing traditional college
outcomes for retention, success, and college completion (p. 2). She noted that education reformers
are insisting that higher education institutions and K–12 educational systems institute establish
consistency by pursuing coordinated programs that will address student needs prior to high school
graduation. This level of consistency could be initiated through the aligning of requirements for
college courses with requirements for high school graduation (Complete College America, 2012).
In addition to alignment, college ready anchor assessment could be used to target necessary
interventions and placements early in a student’s academic career- as early as high school
(Complete College America, 2012, p. 7). A model partnership of this type can be seen in the
Adelante, K-16 partnership in Santa Ana, California. This collaborative partnership successfully
decreased student enrollment in developmental education courses and increased the student
graduation rate (Domina & Ruzek, 2012). It also tailored the partnership to the needs of the
students and the local community and has proven to be one of the few K-16 partnerships looked at in-depth (Domina & Ruzek, 2012). The need for a system that provides academic preparation for college curriculum in high school and that allows students an opportunity for direct involvement in rigorous academics, impacting involvement with peers and with teachers is a necessity (Marchione, 2012). A collaborative partnership of this type allows for cognitive and affective growth in academics and self-efficacy.

Looking through the conceptual framework of academic transformation, Marchione sought to determine the best way to implement change in the developmental program at Alexander Community College in New York. Marchione’s one-year case study determined that the issue in developmental education was not found at the college level, but it was found at the level of K-16 collaboration with college curriculum (p. 160). The researcher concluded that there was a need for ACC and for other colleges to transform developmental programs by doing a number of things. First, she suggested that there was a need to expand freshmen orientation programs and freshman support initiatives (Marchione, 2012). She also noted the need for further research into building successful bridge programs that could act as preparatory programs for incoming freshmen and the need to build collaborations with school districts to increase student preparation for college course work and to decrease the need for numerous developmental courses.

Attempting to understand the state of developmental education from the viewpoint of educators may shed light on possible answers to key developmental education concerns. In Hamilton’s (2014) study, the researcher used a qualitative study design to look at the state of developmental education in Nebraska’s community colleges. Like Marchione (2012), the researcher attempted to determine the perception of postsecondary educators as to best practices for developmental education as it relates to student persistent and outcomes. Using gathered data from 26 faculty interviews, the researcher determined the following: Nebraska’s community
colleges developmental education programs had experienced changes in curriculum and in curriculum delivery; however, there was a discrepancy among the participants as to which changes were the most effective. Acceleration models have as their objectives the minimizing of time required for students to become college ready and the reduction of points towards dropping out of college (Hern & Snell, 2014; Edgecombe, 2011). However, in Hamilton’s study, 5 of the 26 interviewees determined that accelerated courses were not beneficial to the students. The researcher noted that the accelerated classes moved at such a fast pace that developmental students were not given the extra time that they needed to succeed (Hamilton, 2014). Of the interviewees, 22 of the 26 interviewees agreed that developmental education was necessary for a great many students. The interviewees in this study formed the consensus that although alternative methods of course delivery were needed for developmental education, the most effective method of teaching to ensure student outcome was one-on-one instructional time, which contradicted the implementation of more on-line classes (p. 165). In consideration of implementing more one-to-one instructional time, the study determined that more effort would be needed in coordinating and aligning course objectives for meaningful outcomes.

The interviewees in Hamilton posited that there was the need for course alignment and that this alignment needs to take place on several different levels of the educational spectrum. According to Hamilton (2014), the idea of college readiness cannot be addressed at the college level without it first being addressed at the secondary level. In order for that to happen, a developmental program redesign must include dialogue between postsecondary and secondary educational institutions. Hamilton (2014) further noted that:

Whether the number of students who need a developmental class is 70% or 90%, this number needs to come way down, and for this to happen requires a new degree of cooperation. Nebraska’s efforts to make the ACT exam the state’s standard assessment for
11th graders can be used as an avenue to open this conversation. An 11th grader found to be not college ready has more than a year to be redirected and developed. (p. 168)

The study asserted that the community colleges in Nebraska embraced the need for change in their developmental programs, and it also indicated that faculty readily saw the need for a collaborative effort on the part of high schools and colleges to meet the needs of students who are not prepared for college before they graduate.

The review uncovered several studies that placed emphasis on student self-efficacy and social integration, especially in terms of their relationship to their programs of study, their instructors, and their peers. These studies also indicated that a student’s self-perception and integration may have a major impact on his or her academic success and desired goal potential. According to Wernersbach (2011), academic self-efficacy is “tied to an individual’s feelings about him-herself as a person in addition to that individual’s beliefs in his or her ability” (p. 7). In DeAngelis (2014), the focus was academic self-efficacy and its effect on student success and outcomes. The study addressed interventions in DE that affect student’s engagement and success in developmental math classes. In the study, the researcher attempted to determine if the theory of academic self-efficacy could be used to address the affective barriers to developmental student’s success. The study used a quasi-experimental research design to examine the effectiveness of the social modeling intervention. DeAngelis’ (2014) study results indicated that there was no conclusive evidence of improvement in student self-efficacy based on interventions tested. Likewise, Wernersbach (2011) determined that academic enrollment in multiple developmental courses during a student’s first semester of college neither improved nor lowered a student’s academic self-efficacy. However, it was determined that a student’s multiple failures of these courses could lower academic self-efficacy and could lower the chances for student retention (Wernersbach, 2011, p. 410). The results of DeAngelis’ study lead her to determine that “ongoing
and future reform of developmental education should continue to focus on addressing situational and affective barriers to student success; however, academic self-efficacy should not play a prominent role in such reform” (p. 75). The researcher, however, further determined that in order for self-efficacy to become apparent in developmental courses, students should be exposed to positive and engaging interventions for longer periods of time. She noted that student academic self-efficacy coexisted with consistency, student expectancy, and teacher-student engagement.

Lewis (2015) also attempted to identify the best practices that lead to successful outcomes for students in developmental courses. These best practices were determined by faculty and administration who were interviewed and 186 students who took a student involvement survey. Academic integration, social integration, and student involvement were the key guidelines for the study. According to Morris-Compton (2013), academic integration is concerned with a student’s intellectual responses and performance in course work; whereas, social integration places emphasis on a student’s interactions with peers and faculty (p. 13). The results of Lewis’s concurrent mixed method study interviews identified academic integration as the best predictor of student success, and they determined that student academic involvement is key to student success (Lewis, 2015). Six other studies supported Lewis’s finding and upheld Tinto’s model of integration. According to these studies, increased interaction with peers, faculty, and staff increase a sense of belong and support, which translates to an increase in student retention and persistence (Cox & Ebbers, 2010; Deil-Amen, 2011; Karp, Hughes, & O’Gara, 2010). Another important factor that Lewis’ study revealed was that there should be an alignment with non-developmental education courses and developmental courses to ensure student academic outcomes. This type of academic integration, involvement, and alignment not only boosts student’s academic outcomes, but it also boosts their self-image, which has an effect on their academic outcomes (Lewis, 2015). The study furthered that more research should be conducted to ascertain if there is a way to align K–12 educational
instruction with college level skills and college level course requirements to provide opportunities for student college success prior to leaving high school.

Because the on-going topic of concern in the field of education is under-prepared students and their lack of college readiness, improving student readiness, student retention, and student persistence are shared objectives of higher education institutions, educators, and scholars across the country. Jaggars and Stacey (2014) noted that 68% of the students who attend community colleges take one or more remedial or developmental courses. This staggering figure is an indicator that the disconnect between high school graduation requirements and college entry requirements exists and, is a relevant issue in higher education today. Because there are such a large number of students who enter college unprepared, researchers and educators are searching for ways to address the issue. They are also looking for innovative strategies that will define measures for assessing college readiness; implement suggestions for course and policy redesign and provide statistical data that may eventually direct policy changes and developmental and remedial learning pathways. Close examination of the body of literature associated with this study reveals several topics of research focus and themes that recur and have relevance to the state of developmental and remedial education.

**Effective means of improving student outcomes in developmental education.** One of the themes recurrent in the literature is the concept of determining the most effective means of improving student outcomes in developmental education courses and programs at the college level. Bremer et al. (2013), for example, conducted an analysis of data that was taken from their Relative Impact Study. The purpose of the initial study was to determine the different variables that impact interventions to improve student achievement, retention, and overall outcomes in postsecondary educational developmental programs in three different community colleges in three different states. The analysis examined data collected from 7,789 students who made up two cohorts of
students from the fall of 2009 and the fall of 2010, and it included an assortment of variables that ranged from demographics to placement test scores. Much of the data had a direct bearing on student retention, but other data were analyzed that had no bearing on student retention. This data included financial aid, student majors, and other similar data. Outcome trajectories were examined using a series of regression and logistic regression models. The analysis revealed that student outcome was impacted by three key factors, especially into the second term of college. These factors included math ability skills upon college entrance, early reading intervention and placement, and participating in tutoring services during the first term (Bremer et al., 2013).

Schak et al. (2017) reported that although interventions during a student’s first and second terms have evidence of being beneficial, the best opportunities for improving outcome trajectories is while students are still in high school. They determined that a redesign of a student’s senior year offers an opportunity for early assessment and intervention. Jobs for the Future or JFF (2013) concurred the need for redesign and offered an early assessment program that allowed students with academic difficulties to participate in an early assessment program in the fall of their senior year. Those students who had early assessments and academic interventions during the fall were then allowed to take college level course during the spring of their senior year. These types of early college initiatives aided in closing the achievement gap for underprepared students (Bremer et al., 2013). Overall, the researchers noted that student outcomes were greatly impacted by early placement and early intervention.

The implementation of academic interventions for students who have academic deficiencies is a common denominator in prompting changes in student outcomes in developmental education. Several studies have looked at interventions to determine their effectiveness. Dalton (2011) looked at the effects of peer tutoring and Supplemental Instruction (SI) on student outcomes in community college developmental reading courses. The study
addressed student pass rates, academic performance, retention, and persistence, and it used archival data that was collected from five semesters of comparative SI and non-SI developmental reading courses to determine if the implementation of Supplemental Instruction provides a significant statistical difference in student outcomes. Using independent sample t-tests, Dalton determined that there was not a significant difference in the outcomes of students who had SI support and those who did not have SI support.

In contrast to Dalton’s findings, Price, Lumpkin, Seemann, and Bell (2012) tracked 75 students in introductory course work, who attended PASS to determine long-term and short-term retention. PASS is a supplemental instruction session better known as Peer Assisted Study Sessions. The sessions occurred outside of the regular classroom setting three times a week, 50 minutes each session (p. 10). Of the 67 students that were a part of the final research sample, 42 students voluntarily attended PASS sessions. The study results showed that those students scored higher on tests and quizzes than those who did not.

Price et al. (2012) found PASS to be effective in not only improving students’ academic outcomes in their introductory course, but they also determined that student self-esteem and self-efficacy were positively influenced. Dalton (2011), on the other hand, concluded that Supplemental Instruction was an effective tool that impacted student outcomes if initiated early in a developmental program and if utilized as part of developmental support services (pp. 85–86). He did decidedly note that positive SI outcomes were greatly influenced by student attendance and the use of services provided. Because of this factor, the study made recommendations that promoted better implementation of SI services and that warranted further investigation into the effects of SI on student outcomes in developmental reading and other developmental courses. In concurrence to this indication, Price et al. (2012) concluded their study by stating that there are a large number of variables that can influence student participation in an SI program. They also recognized that
the variables that have the greatest influence on the effectiveness of SI programs such as PASS are also difficult to pinpoint (p. 22). The final recommendation offered is additional research to determine the long-term benefits of these types of student interventions and implementation at earlier points in a student’s academic career.

Many educational institutions are considering the implementation of transition courses to improve student college readiness and student academic outcomes. Herman et al. (2017) looked at the academic outcomes of first-time freshman at Northern Marianas College. The study compared students who were identified as under-prepared students. The study noted that 80% of entering freshmen were placed in developmental English courses and 91% were placed in developmental math courses. After tracking these students for 8-semesters, it was determined that only 39% of the developmental students had advanced to college-level, credit-bearing coursework. In addition, only 30% of the students placed in developmental math had moved on to college-level math courses. The study revealed that students who were identified as developmental students, earned fewer credits, maintained a lower GPA, took longer to advance to college-level course work, and had lower chances of graduating from college. The study also revealed that student retention, success, and graduation from college hinged greatly upon the outcomes of secondary education.

Herman et al. (2017) noted that “having better aligned college readiness/ transition courses in high schools might help school seniors become better prepared for credit-bearing college coursework” (p. 18). JFF (2013) reported that offering interventions in the form of transition courses to at risk students early in their educational career is becoming a common strategy in education. According to Barnett, Fay, Bork, and Weiss (2013), 29 states have initiated statewide transition curricula for high school students, and nine other states began designing interventions. Transitional curricula course design included modules, online tutorials, and additional educational tools and experiences implemented for students at-risk of graduating underprepared in either the
Barnett et al. (2012b) documented the implementation of a state’s high school early college transition curricula. The two capstone courses that were piloted in Virginia in math and English were included in 20 high schools across the state of Virginia. The study indicated that based on the newness of the courses, it was too early to determine if the 20 high schools that participated had seen insignificant academic success with the students who took the course. However, they did conclude that the program had the potential for success with proper collaboration between the states community colleges and participating high schools especially in the areas of alignment, teacher training, and student assessment.

The attempt to determine the best ways to implement practices to facilitate successful outcomes for students who have academic deficiencies is a challenging task for educators and researchers. Lewis (2015) used a concurrent mixed method approach to identify the best practices to be implemented in developmental education courses to ensure positive and successful student outcomes. She approached this study from the aspect of obtaining faculty and administrator input through the use of an interview questionnaire and face-to face interviews. Using a multivariate analysis as well as a One-Way ANOVA, she obtained the 10 best practices for developmental education to advance student success. Lewis (2015) used accumulated student data to determine how academic integration, social integration, student involvement impact student overall outcomes for students taking developmental English, reading, and math courses as opposed to those enrolled in college-level courses. The results of the qualitative portion of this study were the results of the faculty and administrator interviews. According to the results, the 10 best practices in developmental education to substantiate positive student outcomes for students enrolled included: placement in regular academic, credit-bearing courses as soon as possible, DE education courses that were self-paced with established deadlines and guidelines, course offerings that included accelerated-pace coursework and full-time courses, early initiation and involvement in college life.
(socially and academically), alignment of developmental and non-developmental course work, intense one-to-one counseling concerning academic plan, faculty and student communication, and faculty mentoring (Lewis, 2015, p. 116).

Minnesota State (2018) reiterated Lewis’s findings and offered a strategic roadmap for DE redesign. The roadmap outlined a four-year initiative for the state of Minnesota that could possibly lead to a shift in student outcome in DE. The initiative included acceleration options, accurate course placements, comprehensive student support systems, pilot programs to increase transition options, and improvement of college readiness in high school students. In the study, Lewis combined data to determine that there was a definite connection between the 10 best practices identified by administrators and faculty and the overall outcomes of developmental students. Minnesota State (2018) surmised in their report that collaboration between high schools and university and college faculty establish a stronger alignment between secondary and postsecondary curricula and supports successful college transition for students. Both maintained that the practices identified provide strong implications when determining ways to improve developmental education and enhance student outcomes.

Lucas (2014) addressed improving student outcomes by improving collaboration and teaching practices among teachers and counselors through the use of implementing Lesson Study or professional learning experiences. The purpose of implementing LS was to help instructors improve the learning experience for the developmental education students, and by doing this improve their retention, persistence, and academic outcomes. Lucas (2014) also sought to determine if Lesson Study helped teachers to improve their own self-efficacy as instructors. Shaw (2014) acknowledged that by “retraining teachers to work with a remedial population to make lessons more relevant, interactive, and skill based” the odds of improving the learning experience of DE students increased (p. 39). Lucas’ mixed-method study allowed five teachers to reflect on
their teaching practices and share their thoughts and teaching experiences. Through the analysis of the qualitative data collected, the researcher identified four changes in their instruction because of the use of LS: preparation, teaching approach, focus on student learning, and focus on evaluating instruction (p. 127). The study results showed that Lesson Study improved student -learning outcomes to a higher degree than did the non-LS experience, and it indicated that counselors and instructors saw an increase in their self-efficacy of their teaching skills and abilities.

**Alternative developmental education programs: Postsecondary level.** A second recurring topic in the literature review was the examination of alternative programs that can possibly affect student preparedness for college-level courses and that could affect student academic placement once they enter the postsecondary setting. Neuenschwander (2015) examined the use of a one-time cohort styled remediation program at a small private university. The aim of the study was to conduct a summative program evaluation in order to give insight into the program’s effectiveness. Although the cohort program was only in place for one academic year before it was discontinued, the researcher noted that the program ended without an evaluation of its positive or negative impact on student outcomes. She determined that a final analysis of key attributes of the program would be useful to implementation of future programs of this type.

To determine effectiveness, Neuenschwander (2015) made use of both quantitative and qualitative data samples that resulted in conclusions concerning program strengths, limitations, and concerns. Neuenschwander (2015) made use of analyzed and coded interviews from participants and faculty, and she also made use of archived administrative data, which included demographic and academic data. The interviews included antidotal evaluations from students and instructors. The results of the data collected compared the data of the students involved in the 2012 remediation cohort and those students in the 2013 non-cohort individualized remediation students enrolled. The qualitative data analysis determined that immediate flaws in the cohort program
existed, which included poor communication concerning placement into a remedial program, misplacement of students in the program, detriment of time loss to graduation, and course limitations. The study indicated that only 37 of the 67 cohort remedial students were retained by the institution. In addition, the quantitative data determined that when comparing the retention rate of the two groups, there were not statistical differences indicated (p. 128). The study concluded that the remedial cohort program had flaws, and the flaws would have to be addressed before this type of program could be successfully re-implemented.

The FastStart program was an accelerated or compressed course program model implemented at a community college in Denver, Colorado. Acceleration is defined as a “strategy used by community colleges to reduce the amount of time students spend in remediation … allowing them to enroll more quickly in courses leading to certificates or degrees” (Venezia & Hughes, 2013, p. 39). Edgecombe et al. (2013) presented their findings from a quantitative analysis of the math component of this program in order to examine student persistence, retention, graduation, and academic outcomes. The data for this report was collected in a two-day site visit, and it included seven semistructured interviews with faculty, administrators, support staff, and students. The students included those currently enrolled in the college at the time of the study and former students. Classroom observations were done during the study, and various policies, programs, and academic course documents were analyzed. The student outcomes data was taken from first-time community college students during or prior to the year 2008, and the academic outcomes were tracked for three years for students in two developmental math classes. The study divided students into two groups, which included the program group and the comparison group that was made up of the students who did not participate in FastStart.

The study results showed that students in the program had a slightly higher short–term persistence rate and had a higher chance of passing on to a higher- level math course. Edgecombe
et al. (2013) noted, “the predicted possibilities for the program show that 80% of regular developmental students and 83% of FastStart students would earn a grade of C or better in the course” (p. 46). The researchers suggested that this was likely due to the intense screening that took place before student placement in the program and the higher quality of teachers committed to instructing the courses. They also determined that the acceleration of courses that took place in the FastStart program provided positive outcomes for its students; however, the tracking proved too short to capture distinctive long-term student outcomes.

Another study that dealt with accelerated developmental and remedial courses, as a way of improving developmental student’s academic outcomes was the study by Floyd (2017). This researcher examined the effect of accelerated or compressed courses in developmental English and math in a rural Mississippi community college. The study was based on a non-experimental research design, and it compared traditional 16-week developmental course instruction to accelerated course 8-week instruction. The study aimed at identifying the overall effectiveness of this type of course formatting on improving student success, retention, and graduation rates in the rural Mississippi community college setting. The data for this study were collected from three rural Mississippi community colleges between the fall of 2010 and the fall of 2015. Using a series of descriptive statistics from archived historical enrollment and academic data and the IBM Statistical Package for Social Sciences to organize and evaluate the data, the study measured success by examining student’s final grades in the course and their ability to complete course assignments. The study showed statistically significant differences in the Intermediate English courses as well as in the Beginning and Intermediate Math courses. The study also determined that students who used the accelerated or compressed courses could take two developmental courses in the same amount of time that it takes to take one developmental course, and in doing so accelerate their time to gateway courses and to graduation. Floyd (2017) concluded that the number of
developmental courses was not considered a determination of student success. Reducing the time in developmental courses, did, however, seem to have a significant and positive impact on student outcomes and their overall retention rate, academic success, and ultimate graduation. Hodara and Jaggars (2014) countered these findings by noting that there was limited empirical research available on the effects of accelerating students through their developmental studies.

Another postsecondary attempt to improve student outcomes in developmental education can be seen through the implementation of developmental learning communities on college campuses. Weiss, Visher, Weisman, and Wathington (2015) described the results of one of the largest independent randomized trial studies in education history. This qualitative study was conducted using six community colleges across the United States. The community college selected were: The Community College of Baltimore County (CCBC) in Maryland, Hillsborough Community College (Hillsborough) in Florida, Houston Community College (Houston) in Texas, KCC in New York, Merced College (Merced) in California, and Queensborough Community College (QCC) in New York. These colleges were selected because of their contrast between developmental learning communities and their standard developmental classes. Each college’s learning community operated under varying models of implementation and maintained learning communities that involved co-enrollment of a cohort of developmental students into two or more developmental classes of either math or English. In addition, they required teacher collaboration in order to ensure that student learning was integrated with academic and social experiences to forge an integrated learning community. The primary indicators used in the analysis included student academic progress while in the course, credits earned outside and within the targeted course, and total credits earned. Other forms of research data included a variety of observations and interviews.
Using ITT impact estimates and MDCR calculations, the study revealed that program students earned 2.72 credits in targeted subjects compared to 2.20 in traditional DE courses, which showed a 24% increase. Although this was only a slight increase, the researchers contended that in time that percentage would grow. For total credits earned, LC students earned 0.53 total credits compared to the traditional students who earned 6.38 total credits, an 8% increase. A thorough analysis of the data accumulated from all six community colleges revealed that KCC’s program proved particularly effective, with an impact of 1.49 credits, which is nearly three times the pooled average of 0.53. The results of the study showed that the LCs in these six community colleges, as a whole, had only a small impact on overall credit accumulation. However, the study showed that LC’s perhaps had enough impact on student student’s sense of self-efficacy, feelings of integration, and sense of individual success to encourage further study into community experience and its impact on student long-term academic outcome.

Ashley (2012) also examined a learning community approach to improving student outcomes in developmental education. His study focused on Hinds Community College in Raymond, Mississippi. The study compared two groups of developmental students in order to determine the overall effects of the LLS 1151 College Life Program on student grades, student retention, student graduation rates, and student overall academic outcomes. The first group was transitional (developmental) students who had been identified as doing poorly during their fall semester in developmental courses. These students were placed in a mandatory learning community where they were assigned to a freshman residential hall intended for transitional learning community living. They were also mandated to take a semester long study course that was lecture based and very similar to a freshman seminar course. The second group was the comparison group that consisted of transitional students who were taking the traditional developmental courses without the mandatory residence hall placement or the mandatory
enrollment in LLS 1151. The study revealed that of the 485 transitional students who were apart of the study, only 64 degrees were earned. Of those degrees, the 280 students placed in the LLS 1151 College Life Course earned 30 and non-LLS 1151 students earned 34 degrees.

The study’s results indicated that the students in the LLS 1151 College Life Course were less likely to finish their program of study with 10.7% to 16.5% difference; therefore, the program was not effective (Ashley, 2012). The study results also determined that there was no statistical difference in the number of total hours accumulated by the two groups of students. LLS 1151 students earned an estimated 30.3 over the four-year period and non-LLS 1151 students earned an estimated average of 28.58. Although the data analysis revealed that there was no significance impact on grades earned in the comparison groups, statistics showed the one area of noticeable difference was found in student academic performance in the LLS 1151 class itself, based on attendance. The LLS 1151 class had an overall effect on student grades in the developmental courses. Although the mandatory placement in the learning community did not yield definite changes to student overall academic outcomes, Ashley’s (2012) study resolved that LLS did offer students a more structured learning environment and gave them the support of developmental staff and their peers. Ashley (2012) concluded the study by recommending that more research be done on the matter with emphasis on a longer period of concentration and academic support.

K–12 and postsecondary partnerships and collaborative ways to improve student outcomes. A third theme that emerged in the literature review deals with the on-going attempt to remedy the issue of the lack of student preparedness for college through a collaborative partnership between K–12 and postsecondary education. This movement calls for an alignment of K–12 instruction with postsecondary curriculum requirements. Crawford (2015) focused the study on the effectiveness of The Minding the Gap Project, which was a college and career readiness partnership between high school teachers and university faculty. The partnership was designed to
align the K–16 curriculum with college readiness criteria in order to reduce the number of students needing remediation when entering college. The scope of the project was to provide early assessment and intervention tools to be used prior to high school graduation. Crawford’s (2015) embedded case study used both quantitative and qualitative methods to document to outcomes and effectiveness of the early assessment and intervention program, to explore the effectiveness of the technology acceptance and self-regulated learning within the computer assisted learning environments, and to collect feedback on participant experiences and perceptions during the study. Implementing data collection using placement test scores prior to and after classroom intervention steps, technology awareness questionnaires, a survey, and pre-tests and post-tests using ALEKS, this study determined that there were no significant improvements in student COMPASS scores after intervention. Pre-test and post-test results using ALEKS software only showed slight differences, 11.02 and 13.40. Although the study revealed that student acceptance of the technology assisted instruction was positive and that the use of the technology was deemed easy, the overall effect on student outcome was not significant. Crawford (2015) concluded that further research is necessary and that the early assessment and intervention programs be expanded in order to see marked changes in student outcomes.

A noted collaborative effort between community colleges and secondary education is the summer bridge program, which allows recently graduated high school seniors who are identified as not being college ready opportunity to gain skills within a six-week to eight-week period of summer that will help them transition into college-level courses in the fall. Barnett et al. (2012a) in their study, examined the effects of a developmental summer bridge program on student outcomes in eight 2009 programs in Texas. The researchers conducted the initial research and included a two-year follow-up to make their final determination. The courses addressed within the programs were accelerated instruction in basic math, reading, and writing. The programs also
offered college skills course assignments. The data of this study showed that the programs had no effect on the average number of credits the students attempted to earn or earned. According to Barnett et al. (2012a), the program group, the ones who were apart of the summer bridge program earned 19.4 credits, and the control group, those students who did not have the summer bridge experience, gained 19.9 credits. The study showed that the program only had a direct impact on the first level of course completion in college level math and English courses. By the end of the second year, it indicated no significant changes in the student overall outcomes or persistence. Barnett et al. (2012a) concluded that the cost of implementation of the summer development program was not justified by the absence of improvement in student persistence, student academic success, and student outcomes. Complete College America (2012) suggests that these costs can be reduced and improvements can be achieved and maintained by the alignment of college requirements with high school requirements prior to high school graduation.

Other studies point to the need for a feasible solution to bridge the gap for underprepared students leaving high school for college. Kallison and Stader (2012) also conducted a mixed study of quantitative and qualitative data analysis to report the effectiveness of summer bridge programs at colleges in Texas. These programs took place during the summer of 2007 and involved seven public community colleges and seven public universities that each partnered with one or more of Texas’ independent school districts. The students participating in the programs included 11th and 12th grade students who based on their state test scores scored high enough to graduate from high school but who scored too low to meet the standards for college readiness (p. 343). The program had 782 participants of various demographics. In order to determine the outcomes of these students, the researchers used several instruments for its qualitative data analysis. The data was taken from pre- and post-test scores that came from either The Texas Higher Education Assessment, COMPASS scores, or ACCUPLACER scores and a post program exam. Nine
programs lasted four weeks, three lasted five weeks, and two lasted six weeks. The number of hours that students spent in the classroom settings and the program locations also varied. Twelve of the programs were conducted on college campuses and two were conducted on high school campuses. In addition to these variations, the curriculum used by each of the programs varied from specific curricula designed specifically for the program to curricula used for regular developmental education courses to ACT based curricula (p. 344). Collaboration between colleges and school districts also varied from full district involvement to very limited district involvement. Several programs made use of district involvement that included the use of high school personnel for instruction, recruiting of students for enrollment, paying of staff and support staff, and providing transportation and program management (p. 347). The collaborative effort and all-in involvement of cross-institutional programs seems to have a key influence on student impact.

Kallison and Stader (2012) indicated through the pre-test and the post-test data that of the fourteen institutions that conducted the summer bridge programs, the only two that were identified as having high post-test achievement gains were the schools that showed significant district involvement. This involvement included district transportation to and from the program facilities, district implementation of staff development, and district implementation of student support staff and labs (p. 348). These programs also showed evidence of district overall investment into the bridge programs. The open-ended survey results showed that the overall response to the summer bridge program experience was a positive one; however, Kallison and Stader (2012) concluded their study by indicating that in order for these types of programs to see substantial improvements in student academic outcomes, several key elements must be in place. The programs must seek school district and postsecondary collaboration, there must be professional development for both district and college personnel and support staff, and school district faculty and postsecondary faculty must collaboratively develop a curriculum specifically for the program (p. 354).
Dual credit and articulated credit hours are being used as a way to improve student academic readiness. Gaines (2012) examined the unique collaborative partnership between Midwest Community College and the Urban Public Schools Urban Career Technical High School. This partnership provided a dual credit technical program that allowed high school students who were interested in a technical career and tech prep education to take community college technical courses while still in high school. These courses gave the students access to the community college from high school, and they offered the students an opportunity to gain college credits that would also give them credits towards their high school diploma. The program addressed the student’s remediation needs, which allowed them the opportunity to move beyond developmental and remedial course work once they entered college. Together the two institutions co-developed a curriculum to ensure that the high school and the college curriculums were aligned so that students would have easy matriculation into college level course work and would have a smooth transition into specific associate degrees (p. 12). The research study sought to describe how the collaborators of this program “perceived the process of developing and implementing a strategic partnership and subsequently determine whether it is working or not” (p. 13). The study used a qualitative data methodology by asking collaborators to answer four non-structured interview questions, which acted as lead-in questions that opened the door for a rich descriptive narrative. The participants of the interview included administrators, college teachers, and high school technical staff. The study was extensive, and the interview data yielded rich and descriptive data that the researcher deemed beneficial to future study. The final assessment was that more research is necessary to identify success measures and actual college completion outcomes for students in programs similar to the one documented in this study. According to the research findings, the key factors to a successful collaborative partnership between postsecondary and K–12 institutions are leadership, structured
communication, and curriculum alignment. Gaines (2012) concluded the study by noting that the partnership identified in this study has the potential of changing student outcomes.

In their research brief, Kilgore and Wagner (2017) looked at the similarities and differences of perspectives of dual credit and duel enrollment for postsecondary education and K–12. They also made several proposals for practices that would affect the academic outcomes of students enrolled in dual enrollment programs. According to their research, the number of students participating in dual enrollment had increased by 75% from 2002 to 2011 from 1.16 to 2.04 million students (p. 57). Also, they reported that the traditional focus of dual enrollment programs as a means for advanced and gifted students to gain college credits while still in high school has shifted to include dual credit programs that help to improve student college readiness. The researchers asserted that these courses now have the potential “to help prepare students for the rigors of college, to provide accelerated pathways to college degrees, and to increase the likelihood of high school students graduating from high school and enrolling in college” (p. 58). According to their brief, dual enrollment courses can be used as a way to help bridge the ever-widening gap between postsecondary expectations and high school preparation. Kilgore and Wagner (2017) determined that these dual enrollment courses decrease student’s need for remedial or developmental courses once they get to college.

The brief documented a series of survey questions asked of college, university, and high school administrators concerning the benefits of dual enrollment. Seventy-six percent of higher education administrators versus 52% K–12 administrators were inclined to believe that dual enrollment prepared students for college. K–12 administrators were inclined to believe that dual enrollment best enhances the experiences of advanced students. These administrators also were inclined to voice that the lack of credentialed instructors is a barrier of dual enrollment for extending student needs. The brief also revealed two other barriers- the cost of the program to
families and the cost of the program to school districts. Several implications arose from the review concerning K–12 and higher education dual enrollment practices, policies, and concerns. These implications included the fact that higher education institutions may provide opportunities to offer instructor credentialing program options. Kilgore and Wagner (2017) furthered that, costs of programs can be reduced with creative and versatile means by utilizing the collaborative partnerships of K–12 and postsecondary programs that are within the guidelines and boundaries of legislative requirements. The brief revealed that dual enrollment programs could benefit students and their academic outcomes.

**Review of Methodological Issues**

The literature reviewed in Chapter 2 provides evidence of differing methodological approaches to research that range from the quantitative approach, the mixed method approach, to the qualitative approach. Each researcher identified in the literature review selected the method that best suited his or her research topic, research problem, and research question. According to Creswell (2014), the researcher’s choice of methodology greatly depends on the “philosophical worldview assumptions” (p. 5) that the researcher uses to approach the research problem. The decision of the choice in methodology also depends on the researcher’s research design or procedures of inquiry and the methods of data collection that the researcher chooses.

The literature presented in Chapter 2 represents the major approaches implemented by the selected researchers in their attempt to address the problem concerning the growing gap between students who leave high school and enter community colleges across the country underprepared. The approaches identified in this review served to inform this researcher’s decision concerning the theoretical and the empirical focus of this study. The researcher’s close examination of the approaches used in each study helped the researcher to select the qualitative approach for this study. The researcher determined that the qualitative approach allowed for the flexibility of
discovery and provided the opportunity for rich and meaningful dialogue from the participants in the study. Creswell (2013) acknowledged that the qualitative approach upholds a “social constructivist worldview” that allows the individuals who are actively involved in the setting to construct meaning from the situations and circumstances in which they are apart. Using the qualitative method, the researcher was able to lay the foundation for the argument that this study is necessary to offer additional knowledge (knowledge gathered from the rich dialogue of high school and community college educators) concerning a future direction for developmental education, its policies and practices in the state of Mississippi and perhaps nationally.

**Synthesis of the Research Findings**

Each of the studies reviewed in Chapter 2 look at the issue of developmental education with the intent of identifying key areas of concern with student persistence, retention, or academic outcomes. Although research methodology, research settings, and the number of research participants varied, each study led researchers to the same conclusion. The general consensus is that there is indeed a need for change concerning developmental education, especially as it pertains to the handling of the education of students who are at risk of not being prepared for college when they complete high school. Close analysis of the literature revealed that the community colleges have, traditionally, taken on the responsibility for addressing this issue; however, community college developmental programs have not adequately solved the problems that these students face.

Further analysis of the literature revealed the effects of the implementation of supplemental instruction, peer tutoring initiatives, lesson study programs, learning communities, summer gap programs, cohort remediation programs, dual enrollment, and accelerated courses. In many instances, the researcher determined that the literature reviewed in this study identified positive changes in student’s academic success based on different study results. However, the literature also
revealed the need for additional data and more extensive research study to substantiate the findings of individual studies.

Based on the analysis of the literature, the researcher discovered that there is an underlying need for a bridge to exist between K–12 and postsecondary institutions in order to meet the needs of underprepared students before they leave high school and before they go to college. Domino & Ruzek (2012) determined that this type of collaboration had the potential to successfully decrease student enrollment in college developmental education courses and to increase student graduation rates. Complete College America (2012) acknowledged that a key collaborative effort could be initiated through an alignment of high school graduation requirements and college course needs. Hamilton’s (2014) study revealed that although course alignment needs to take place in various levels of the educational arena, alignment must first take place in secondary education. This, according various researchers, can only take place through the redesign of developmental programming. According to Hamilton (2014) program redesign must include active dialogue between postsecondary and secondary educational stakeholders. Further review of the literature reveals that there has been limited research to address the perceptions of educators at the postsecondary and secondary level on this need.

Critique of the Literature

During this literature review, the researcher discovered the strengths, weaknesses, and limitations of the research designs presented in each study. For example, in Dalton’s (2011) quasi-experimental study, the results revealed significant comparative data concerning student outcomes after having been provided with supplemental instruction. However, the findings were limited, not by the research methodology, but were limited because of the setting and the participants. The study was limited to only one college and to students in developmental reading courses. Although the researcher’s findings in this study strengthened the argument for the need for alternative
methods of instruction for developmental students, the strength of the argument was weakened by the limitations. The results of the study indicated the need for additional data from a wider research spectrum.

In the study of Herman et al (2017), the researcher used quantitative data to examine the limited reach of developmental education on a community college campus. In this study, the researchers revealed evidence of the inconsistencies of the community college’s program in the areas of student retention, persistence, and graduation rates. The study also determined that long sequencing in developmental courses hinders student academic success and contributes to student dropout. The key limitation in this study proved to be in research methodology. The descriptive design of the study limited the inferences that could be made in the analysis of student data. In addition, the study did not allow for follow-up through the tracking of students involved in the study. Follow-up would have lent more validity to the study’s findings.

In Lewis’s (2015) concurrent mixed study, the researcher identified best practices that gave insight into what key stakeholders believed would lead to improved student incomes within developmental programs. The limitations of this study were in data collection. In the study, rates of completion were taken from 15 Mississippi Community Colleges; however, surveys were only given to administrators at 6 colleges. Although the study’s findings revealed relevant data concerning the state of Mississippi’s developmental program at the postsecondary level, validity would have been greater if the study had been inclusive of data from all 15 schools.

Gaines (2012) used a qualitative design to provide descriptive analysis of participant’s responses to four open-ended interview questions. One of the limitations of this study’s results was the possibility of researcher bias. The prior relationship that the researcher had with participants in the study and those responsible for the technology used in the study provided the grounds for bias. Another limitation of the study was the time lapse that existed between the
program initiation and the commencement of the program and data collection. This time lapse could possibly have had a vital effect on data validity.

Close examination of the above studies and each of the studies identified in the literature review made the researcher more aware of the necessity of utilizing the appropriate methodological approach for the researcher’s study. In addition, the researcher was made aware of the need to gather data that would allow the participants in the study to “make meaning of life based on reflection of their experiences” (Bohnet, 2016). In this study, the researcher is not concerned with the measurable outcomes and variables that quantitative research provides (Gummerson, 2000). Instead, by using qualitative data, the researcher determined to identify and understand the perspectives of postsecondary and secondary educators concerning the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi. In order to do this, the researcher determined to avoid the limitations that quantitative research would afford.

Chapter 2 Summary

In looking at the issue of students who leave high school underprepared to enter college level courses, the questions of how and when to offer remediation have become prevalent in education (Stringfield et al., 2013). The recurrent theme in studies on the retention rate of college students is that approximately one-third of college freshmen need a minimum of one developmental or remediation course (Bettinger et al., 2013; Jackson & Kurlaender, 2014; Sriram, 2014; Tierney & Garcia, 2011). Bautsch (2013) reported that when looking at 2-year community colleges alone, several studies estimate that remediation rates exceed 50%, and as more and more students graduate from high school to enroll in colleges, the need for remediation becomes more widespread. The indicators of the need for remediation and developmental education appear early on in students’ academic careers. Early indicators of academic deficiencies can be seen in student
scores on national assessment tests taken as early as their sixth grade year (Royals, 2016). For example, in the state of Mississippi, Royals (2016), reported that over 16% of the sixth grade students taking the English Language Arts Test scored at the lowest level on the test, and over 24% of the students scored basic or level 2. By the time students reached their 10th grade year, the students who scored basic level dropped to slightly over 20%; however, student scores on the PSAT, the pre-college entry tests indicated deficiencies in student readiness (Royals, 2016).

High school students, according to Bautsch (2013) are not testing at college-ready levels: for example, it is reported that only 25% of the nation’s students who took the 2012 ACT met readiness benchmarks in all four core subject areas-English, reading, math, and science. As a result of the increased number of students who enter college under-prepared, the costs for these students and the institutions increase. Strong American Schools (2008) reported that the estimated cost of remedial and developmental education to states and to students is approximately $2.3 billion each year at community colleges alone. This cost, however, is compounded by the fact that less than 50% of the students who enroll in remedial or developmental college programs will complete the requirements of their programs (Bautsch, 2013).

Although the financial costs of developmental and remedial education are significant, there is also a significant psychological cost for the students enrolled in these courses. Bailey et al. (2009) noted that students enrolled in these courses not only spend their money, but they spend their time, they lower their sense of self-efficacy, they accumulate debt, and oftentimes, they spend up their financial aid eligibility. It is estimated that less than 25% of these developmental track students will graduate in under 8-years of a traditional 2-year program (Bautsch, 2013). A key incentive for determining a solution to under-prepared students entering colleges and universities is the idea of lowering the cost of higher education for both institutions and students. Alliance for Excellent Education (2011) suggested that lowering remediation and developmental
needs on the college level can save money. It is suggested that by producing more high school students who are college-ready and by reducing the need for remedial and developmental education on the college-level, an extra $3.7 billion could possibly be generated annually as a national average for education (Alliance for Excellent Education, 2011). These savings would be the result of decreased spending on developmental education in colleges and universities and an increase in the tax revenue from students who successfully complete their course work and graduated from college (Alliance for Excellent Education, 2011).

After having reviewed the literature on developmental education as it exists in postsecondary education today, each of the researchers represented in the review determines that developmental education is not accomplishing its intended goal of providing the best programs to facilitate overall academic success and positive graduation outcomes for a high percentage of the students enrolled. Each of the researchers also determined to address the issue of students who enter college underprepared and who have to be placed in one or more remedial or developmental classes. Using Tinto’s (1975) seminal retention model, the researchers theorize that students can be acclimated socially and academically into their course environments and their programs, and by this process, they can successfully complete their developmental programs and move into credit bearing academic courses.

Some researchers searched for positive results using alternative developmental course options to help integrate students into their developmental curriculum and into college life in order to improve their academic outcomes. Other researchers combined Tinto’s (2007) integration and retention theory with Astin’s (1985, 1993) involvement theory, and Bandura’s (1993) self-efficacy theory to identify the behaviors and perceptions that promote student achievement and positive outcomes. These researchers attempted to identify areas in developmental education that can be improved through changes in teaching methods, improvement in developmental policy, or
contribution of additional knowledge. The literature revealed that educational researchers have attempted to find ways to redesign developmental education at the postsecondary level and have searched for alternative ways to address program delivery. The research also indicated the value of having the input of teachers and other major stakeholders in determining the direction and the fundamental impact that developmental and remedial education will have on student college readiness. The review offers the general consensus that the number of students entering postsecondary institutions in need of remedial or developmental coursework is growing each year. The also review also indicates that the problem needs to be addressed before students enter college if students are going to have positive academic outcomes in higher education.

Although community colleges and secondary educational institutions have long maintained collaborative partnerships in Tech Prep Programs and in Dual enrollment courses, these collaborative efforts have catered to a specific high school student. According to Stringfield et al. (2013), tech prep programs of CTE programs are geared towards students who are interested in obtaining both technical skills and academic skills before entering college. The students who enter these courses must meet high school requirements for graduation and must also meet college entry requirement to be placed in college-level courses. Ozmun (2013) noted that dual enrollment or dual credit courses offer a collaborative partnership between the community college and the high schools for students who have a particular grade point average. The students enrolled in these dual enrollment courses have the opportunity to gain both high school and college credits, and these students are more than likely college ready once they enter college. This study proposed to address the perception of the major stakeholders in both the postsecondary and secondary setting to another type of collaborative effort between the two institutions. The general concern of the researcher in the review was the need for intervention and remediation of students before they enter college in order to reduce the number of students who have to be placed in developmental
education programs. The indication was that the reduction of the number of students entering developmental programs will reduce the costs of developmental education for the institutions of higher learning, for the states, and for the students (Bautsch, 2013).

The literature review indicated that there has been little to no research done on the combined effort of postsecondary education and secondary education within the high school setting to reduce the number of students who graduate from high school not ready for college level work. Given the lack of research done on this type of collaboration, this study proved beneficial to the existing literature on the issue of reducing the growing number of students leaving high school unprepared for college level work. The study gave insight into how educational stakeholders perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi.
Chapter 3: Methodology

Introduction

The purpose of this qualitative study was to explore how educational stakeholders perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi. In this chapter, the researcher outlines the methodology used in the study. First, the research question that guided the research was identified. Next, the chapter outlines the research design along with the rationale for the selection of this design. In addition, the chapter identifies the research population and the sampling method to acquire that population. Additionally, the chapter contains a detailed description of the methods of data collection and data analysis. The three phases of data collection for the research project included Phase I Questionnaires, Phase II Interviews, and Phase III Focus Group Sessions. Finally, the chapter identifies the limitations and ethical issues that may interfere with the reliability and the validity of data obtained during the research study.

Statement of the Problem

The problem that this study addressed is how do educational stakeholders perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi. According to ACT (2017), Mississippi fell far below the nation’s average of students who achieved the accepted ACT’s college readiness benchmarks in the core courses of Math, Reading, and Science for the academic term 2017; the national average was 27%, while Mississippi’s average was only 12% (para. 5). As a result of these percentages, Mississippi saw not only a rise in the number of students enrolling in developmental courses in the states community colleges, but Mississippi also saw an increase in the need for mandatory student placement and scheduling for developmental courses in community colleges and junior colleges in fall, winter, spring, and summer of the academic year. Because of
the statistical drop in Mississippi’s student’s college readiness, thirteen developmental courses were added to the community and junior college curriculum (House et al., 2008, pp. 22–23).

According to Thompson (2014) and King (2016), a major concern in postsecondary education is that the students who are enrolled in these programs are at risk from the very start of their college career and have a far less chance of earning a degree or a certificate than the students who enter college on the degree track. The increase in the number of students who enter Mississippi community colleges was also documented by The Mississippi Economic Policy Committee (MEPC; 2012). MEPC (2012) reported that in the fall of 2011, over 22,000 high school students entered Mississippi colleges not college ready. These 22,000 students had to enroll in one or more developmental or remedial courses (MEPC, 2012). This study indicated that 52% of Mississippi’s high school graduates were not prepared for college coursework, and the study confirmed that, of those 52%, only 13% will actually continue their college career to attain a 2-year degree within a three- to a five-year period (MEPC, 2012). The facts noted in both of these reports show evidence that Mississippi’s developmental students must be caught prior to college entry, and the gap in their achievement level must be bridged and somehow rectified so that student opportunity for success can change.

**Research Question**

The following research question guided this study in order to explore the perceptions of secondary and postsecondary educators concerning how to meet students’ needs:

RQ. How do educational stakeholders perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi?
Research Methodology

The qualitative approach was used to answer the research question. This approach allowed for the flexibility that also allowed for the discovery of emerging ideas, themes, and views that will address the problem of student under-preparedness (Stake, 2010; Yin, 2016). The approach also provided data related to the need for remedial or developmental education prior to high school graduation.

Stake (2010) and Yin (2016) each acknowledged that qualitative research is a social constructivist worldview. This philosophical outlook allowed the researcher to explore how individuals construct meaning from the situations or circumstances that exist within a certain setting or contextual frame. In qualitative research, the researcher assumes a direct role in investigating and discovering the participant’s perspectives rather than assuming how participants will react (McMillan, 2012). This process explores both phenomenon and understanding by collecting and analyzing data. It relies on the meaning that its participants or subjects give to the study; for this reason, a key component of this worldview is observing and listening to the study’s participants. Yin (2014) determined that the researcher “maintains the ability to understand and interpret information and data” during the course of a study by being a good listener (p. 74). Good listening skills and adaptability allows the researcher to understand and interpret information without personal bias. Qualitative research produces data that is grounded in a rich narrative description of the research subject’s outlooks. This type of research permits the researcher to formulate questions that enable the subjects to reflect on how they or others view or are affected, have been affected, or will be affected by experiences (Gummerson, 2000). Through observation and thorough analysis of the participants’ actions or responses to open-ended questions, the qualitative researcher can better understand and generate theories or suggestions concerning the research topic.
Research Design

The design that was used in this research was a case study. This design was used because it allowed the researcher to explore the issue by exploring the perceptions of administrators, teachers, and counselors at high schools and community colleges in selected urban Mississippi high schools and community colleges. Yin (2016) observed that the case study design is appropriate for a study if it will allow the researcher to focus the study on answering the question “how.” Yin also noted that with this type of design the behavior of the subjects cannot be manipulated, and the behaviors and responses of subjects will be relevant to this study and other studies. In addition, Yin (2016) determined that this research paradigm is utilized when the researcher is interested in exploring or explaining a phenomenon that has real-world meaning within a real-life context. This design was appropriate for this research because the design met the expectations of determining how the major stakeholders think concerning the research topic.

This qualitative case study was exploratory in its purpose. The researcher sought to explore how educational stakeholders perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi. Yin (2003) determined that the case study approach is best used if interventions that have “no clear, single set of outcomes” are being evaluated. Yin (2014) furthered that, in a case study, the variables of interest will often produce one result that “relies on multiple sources of evidence, with data needing to converge in a triangulating fashion…to guide data collection and analysis” (p. 17).

A three-phase qualitative approach was used for this current research study. In Phase I, after accepting the invitation to the study, participants completed an assessment questionnaire that determined their perceptions of their institution’s success in serving students with developmental education deficiencies. In Phase II of the study, the participants were interviewed face-to-face to
identify areas of critical need in their institutions as those areas relate to the research question. Finally, in Phase III of the research study; focus groups were formed to allow the participants to respond to open-ended questions based on their experiences and expertise to understand their perceptions of areas of critical needs and challenges in the areas addressed through the research question. The three phases of the study provided the researcher with multiple points of data. With this design, the views of the participants were collected, analyzed, and accurately represented in order to best understand how educational stakeholders perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi. The researcher determined that the expertise and experiences of the key stockholders at the selected urban Mississippi community colleges and the high schools were essential to the research study.

The data collected using the instruments identified provided the researcher findings and conclusions that allowed for points of triangulation. According to Patton (1990), and Yin (2003) the use of multiple data sources and the convergence of that data, strengthens the credibility of the data collected in a study. Bogdan and Biklen (2007) and Stainback and Stainback (1988) agreed that triangulation serves as a beneficial tool for developing an understanding of phenomena in the case study that allows for rich, full descriptive interpretation. Marchione (2012) determined that triangulation also helps to eliminate a researcher’s personal biases by providing an opportunity for continual crosschecking of data against what is observed and data analysis.

**Population and Sample Selections**

The participants in this case study included the administrative faculty, guidance counselors, and teachers directly involved in the curriculum, curriculum placement, and instruction at the schools selected for the study. The high schools selected were specifically chosen for this study based on their 2017 college readiness indexes, their proficiency percentages in the areas of English
and math, and their high school rankings. Schools were also been selected based on students’ performances on ACT tests, on subject area tests, and in final grades in the core subjects of English, mathematics, and reading. The two branches of the Mississippi community college included in the study were selected because of their proximity to the high schools selected for the study and because of the number of students from each of the high schools that choose to attend the different branches of this 2-year technical and career community college.

A purposeful sampling approach was used to select the participants for this study. Purposeful sampling is defined as a non-random sampling method. In the purposeful sampling, the members of the selected population were selected because of their knowledge and experience in the phenomenon being studied (Creswell & Plano Clark, 2011). In addition, the study utilized the convenience sampling approach. With convenience sampling, participants were selected because they were accessible and available because of their proximity and their willingness to participate in the study (Etikan, Musa, & Alkassim, 2016). According to Yin (2016), the use of purposeful sampling allows the researcher to obtain a comprehensive understanding of the participant’s views on the research topic and therefore broadens the researcher’s understanding of the topic. Additionally, purposeful and convenience sampling involved less time, as well as cost and effort, to the researcher (Creswell & Plano Clark, 2011).

The participants in this study were selected according to the participant’s role at the Mississippi educational institutions included in the study and according to their willingness to participate. According to Bohnet (2016), the research sample in qualitative research provides the study with the participant’s “assumptions, perspective, and interpretations on the study topic, providing the data for analysis” (p. 63). This study was conducted using a small sample that included community college administrative officers, student counselors, and department heads and faculty members who were selected from the two branches of the Mississippi community college.
included in the study. The sample also included high school administrators, department heads, classroom instructors, and school guidance counselors from the three urban Mississippi high schools identified in the study. Twenty-four educators, a maximum of three from each institution, were initially included in the study; however, twenty educators completed the study.

Potential participants in the study were contacted by e-mail or by regular mail. In the letter of invitation (see Appendix A), the researcher informed participants of the purpose of the study and ensured that participant confidentiality would be kept throughout the study and its publication. The letter of invitation also provided the participants with information concerning the stages of each portion of the research process. Included in this initial letter of invitation to the study was a letter of informed consent (see Appendix B). The informed consent document (ICD) included a confirmation of researcher/participant confidentiality. The ICD also included notification to the participants that they had the right to withdraw from the study at any time. The researcher reiterated in the ICD that participant contributions to the study would remain anonymous in all research reports.

**Sources of Data**

The data sources the researcher used in this study were questionnaires, interviews, and focus groups. The data were collected using structured, semi-structured, and open-ended questions. The structured questions used during the early assessment questionnaires provided initial data that informed the researcher of the participant’s perception of their institution's success in meeting the needs of underdeveloped students (see Appendix C). The early assessment questionnaires also provided the researcher with data that informed the specifics of the semistructured questions that were used in the face-to-face interviews and the open-ended questions that were used during focus group sessions later in the study. According to Glesne (2011), semistructured interviews are pre-planned or specified questions. These semistructured
interview questions allowed the researcher to discover open-new questions that developed as unexpected lines of inquiry that emerge during the interview. They also prompted in-depth probing questions that aimed to prove all points of interest in order to get the interviewee to tell more or to explain all (Glesne, 2011). In this study, these semistructured interview questions offered the researcher suggested areas for questioning during Phase III Focus Group discussions. Glesne (2011) noted that the semistructured interviews are designed “to capture and to understand participants’ perspective and narratives” and “to gather exhaustive data on a complex phenomenon” (as cited in Zarate, 2016, p. 28). In this study, the researcher used the emerging responses from the early assessment questionnaire and later face-to-face interviews to formulate deeper open-ended questions that were used to inform questions in Phase III. Responses provided the researcher data that led to an understanding of how educational stakeholders perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi.

Once the questionnaires, interviews, and focus group sessions were conducted, the researcher transcribed the recorded interviews and interview notes. The researcher transcribed the interviews verbatim using TransciberAG for Mac and hand transcription using Word and recordings using Garage Band for Mac Pro. In order to ensure the validity of the data collected, the researcher gave each participant a copy of his or her interview transcript in order to check the accuracy of the transcription. According to Birt, Scott, Cavers, Campbell, and Walter (2016), this member check, allows the participant to “reconstruct their narrative by deleting extracts that they feel no longer represent their experience or represent them in a negative way” (p. 1803). Once member checks were completed, transcripts were collected, coded, and compiled using standard word processing methods and placed into an Excel spreadsheet; data was then entered into Atlas.ti and NVivo, which are identified as qualitative software, for analysis. The information gathered
from these two analysis soft wares was used to report study findings in narrative and graphic detail.

Data Collection

Data in this study were collected through questionnaires, face-to-face interviews, and focus group sessions (see Appendices C, D, and E). Preliminary telephone calls were conducted to initiate scheduling for phase one questionnaires, phase two interviews, and phase three focus group sessions. Telephone calls were followed-up by e-mail notification (see Appendixes F and G).

The face-to-face interviews and the focus group sessions were audio recorded. In addition, the researcher kept an observation journal during face-to-face interviews and the focus group sessions. After collection from the data instruments, data was carefully coded and documented using Saldaña’s (2016) open coding by hand, in Word and Excel. In addition, transcripts were uploaded to NVivo 12 for coding. The names and institutional affiliations of the participants were excluded from all documents. In the event that further information was needed, audio and any video recordings of the interviews and all e-documents and paper documents were filed in either security coded files on the researcher computer or in a locked file. However, all faculty names and institutional names, other than coded identification markings and indicators were removed from transcripts, interview notes, and observation journal notations.

Data were identified according to acronyms for community colleges and high schools and numerical identification of participants were randomly assigned. The acronyms for community college participants were identified as CCA for community college administrators, CCT for community college teachers, and CCC for community college counselors. These acronyms were followed by numerical identifications ranging from 1-9. The high school participants were identified as HSA for administrators, HST for teachers, and HSC for counselors. These acronyms were followed by numerical identifications that ranged from 1-10.
Data from questionnaires, surveys, face-to-face interviews, the audio recordings, any video or Facebook recordings, and the notes from the observation journals were transcribed and deconstructed into codes. These codes represented key responses from the questionnaires, key phrases and words from the interviews and meaningful expressions from the observation journals. Responses, quotes, and expressions with the same or similar meaning were given the same code, and the number of times the codes were used were tracked. The codes were sorted and resorted into categories until meaningful themes emerge as identification for like codes. These like codes provided data that allowed the researcher to formulate data for the critical needs assessment questions that were used in Phase III of the study, which the researcher identified as Perceptions of Critical Needs and Challenges of Implementation.

The researcher did initial data collection and compilation by reading and re-reading interview transcripts, observation notations, and assessment questionnaire responses. Keeping in mind the research question that guided the study, specific segments of the interview and focus group transcripts, observation journal notes, and the assessment questionnaire responses any predetermined and emergent categories were recorded. The researcher initially used Word and Excel to record data taken from interview transcripts, questionnaires, and field notes. Glesne (2011) defined this form of analysis as thematic analysis and determines that it begins by utilizing data coding. Once the data was compiled using Word and Excel, it was uploaded into NVivo 12 for Mac for organization, storage, and quicker access. The researcher did initial coding of the data taken from the Qualtric Phase I survey using Saldaña’s (2016) open coding method to identify emerging themes. All transcription data was uploaded to the NVivo 12 software and word queries were run to identify other prevalent and recurring words. At that point, the researcher identified and assigned specific categorized headings or themes and coded data into parent nodes and child
nodes that revealed emerging data. The headings or themes were determined by the repetition of ideas or responses.

Overlapping ideas were identified using this software, and further information was provided from data analysis to poise more specific and thought-provoking interview questions that address the problem presented in the study. The emerging questions were used for the next phase of the research study. According to Hamilton (2014), this type of coding can occur:

within Atlas.ti software (and similar software) while reading and re-reading the transcribed interviews with the session notes and assigning short phrases to label important, descriptive or informative information (codes . . . (which can then be) sorted and categorized into overall themes . . . with similar characteristics that help explain the research questions.

(p. 111)

Friese (2014) called the constant review of coding “hierarchical coding”, and he determined that this type of coding offers higher levels of inter-coder reliability. Hamilton (2014) furthered that after four to five interviews, the codes are to be reexamined and patterns of thought are identified (p. 111). An example of possible emerging themes or ideas might be “collaborative effort is possible” or “collaborative effort is not possible.” Based on these headings or themes, the researcher was able to construct open-ended questions that led interviewees to a detailed and rich discussion as to their perception of how collaborative efforts can be made to address the need for remedial and developmental education prior to high school graduation.

Identification of Attributes

This study used qualitative methods to understand how educational stakeholders perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi. The key attributes of this study, based on the problem, were perceptions, implementation, college preparedness,
developmental education, and developmental deficiencies. Each of these attributes was incorporated into the instruments that were used to conduct this study.

**Data Analysis Procedures**

According to Yin (2014), case study analysis can be difficult for the novice researcher because there is no step-by-step process to follow in order to analyze data. For this reason, Yin (2014) suggested that in the beginning stages of case study analysis, the researcher should “play” with their data to discover patterns, themes, and emerging concepts (p. 135). By using simple tools of chronological data ordering, data recording, and data collection such as flow charts, matrixes, and spreadsheets, the researcher gained insight into emerging ideas and themes within the data. McMillan (2012) determined that inductive data analysis is a standard data analysis procedure in qualitative research. Richey (2015) noted that through inductive reasoning a researcher is able to look for and identify trends within the data collected. He furthered that with this information, the researcher is able to generalize a possible conclusion. For this case study, data collection and analysis began with the simple tools made available through Excel and Microsoft Word. Data collection began once the participants in this study signed and returned the consent forms. At that time, participants were coded into the study. Throughout the data analysis process, inductive reasoning analysis procedures were utilized.

In this study, the researcher used the online survey tool, Qualtrics, to develop and administer the questions for the structured questionnaire that was used in the study. However, the Phase I early assessment questionnaire responses were collected, analyzed and coded first using a simple hand coding method and the Mac Pro Word Processing system. The information was later transferred to an Excel spreadsheet for further coding. The results were then categorized and tabulated using the online analysis tools Atlas.ti and NVivo to provide additional data relevant to the research question. These survey tools provided information that delved deeper into the
research question by gaining information that pertained directly into the participant’s attitudes and thinking on questions relevant to the research topic. They provided the researcher with a deeper understanding of the perception of educational stakeholders on the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi. They also offered the researcher direction in poising more in-depth questions during phase two of the study, which was the face-to-face interviews.

Preliminary telephone calls were conducted to initiate time scheduling for phase one questionnaires, interviews, and focus group sessions. Telephone calls were followed-up by e-mail notification. Data collection continued through the three phases of the study: the Phase I Questionnaires, Phase II Interviews, and Phase III Focus Group Sessions. The inductive approach was used in gathering and analyzing data. Glaser and Strauss (1967) noted that with the inductive approach, relevant categories and themes would emerge. During the second phase of the study, all interviews were audio recorded and re-played to ensure that accurate transcription takes place. In addition to the audio recording of face-to-face interviews and focus group sessions, the researcher kept a written record of sessions. The written record (field note journal) was utilized to ensure that the researcher could consider relevant gestures, sounds, or anomalies that occur during the interviews and sessions that audio recording cannot catch. Each audio recorded transcript was reviewed a minimum of three times to further ensure accuracy and to highlight additional notes. Interviews were transcribed and coded within three days of the interview date. The researcher also kept a written log of immediately observable headings and themes in order to make note of emerging similarities.

Interview transcripts and data collected from the research were recorded using Word and Excel and uploaded to Atlas.ti software and NVivo12 for Mac to facilitate official coding. As the
program ran, the researcher read and reread the data to identify themes as they emerge. According to Hamilton (2014), the coding process is complete when no new themes occur in the program. The coding process was examined after the three or four administrative interviews, counselor interviews, and faculty interviews for the institutions that were a part of the study. By examining the coding process after 3 or 4 interviews, “families of codes” or “linked codes” emerged, and graphic links were identified that built narrative discussion that addressed the research question. Friese (2014) recommended that when looking at the coding of vast amounts of data, a researcher should examine codes after four to five interviews. According to Friese, this method provides the researcher with interceding reliability. He determined that this type of hierarchical coding strategy allowed the researcher to not only identify similar phrases and words, but it also allowed those similar codes to be identified with additional characteristics to form a cloud pile of codes. Friese (2014) furthered that these cloud piles of codes helped the researcher to see duplication of codes and the emergence of new codes that further his or her understanding of the research question.

In addition to the detailed coding of questionnaires and focus group sessions, the researcher also provided evidence of the face-to-face interviews by audio-recording each interview, both the formative and the summative. The researcher transcribed the interviews using Word and by using an open source transcription program, TranscriberAG. Kvale and Brinkmann (2009) noted that this program would allow the researcher to review the interviews and to accurately identify the significant data found in each of the interviews. Before the coding process was done, participants were allowed to examine their individual transcripts for validity and accuracy in keeping with the guidance from Birt et al. (2016). Once the member’s checks were completed, and transcripts were edited, the transcript data was uploaded to Atlas.ti and NVivo 12 for Mac in order to complete an open coding. This open coding allowed the researcher to better determine “analytic leads for further exploration” (Saldaña, 2016, p. 81). The researcher followed established protocol in this
study by transcribing 3-4 interviews at a time, keeping in mind the relevance of identifying the perceptions of each participant grouping at each designated institution (Appendix D-E). In other words, the interviews of each of the administrators, guidance counselors, and faculty members of each institution were transcribed and coded in their perspective categories and entered into Atlas.ti and NVivo 12 for Mac in that order to further identify similar themes.

**Limitations of Research Design**

As with any undertaking involving human deliberation, research, intentions, and planning, limitations are inevitable and must be identified. The following section identifies the possible limitations of the study design and of qualitative research in general. This study consisted of 20 educators selected from two community college campuses and from three high school campuses in Mississippi. The educators included nine community college leaders that included administrative officers, student counselors, and faculty members who were directly involved in the subject areas of English and math as they impact students placed in developmental education courses. The educators also include 11 high school administrators, student counselors, and teachers who had direct involvement in the core curriculum areas of English and math and their impact on college preparedness. In this study, the researcher’s key focus was on understanding the perceptions of these educational stakeholders on the implementation of college preparedness and developmental education courses for students with developmental deficiencies.

This study was identified as an exploratory single case analysis that limited its scope to the case of 2 branches of a Mississippi Community College and 3 specified high schools in an urban area of Mississippi. The study was confined to these 6 institutions and was limited to the data collected from 20 participants in the given time period and in these given locals. The study was primarily delimited to faculty directly involved in developmental education on the college level and those who were directly involved in core English courses on the high school level. The study,
which utilized a convenience sampling method, was decidedly limited in the number of participants. According to Mackey and Gass (2005), a disadvantage of convenience sampling is the potential of bias. Mackey and Gass (2005) advised researchers that because of its limited scope, convenience sampling should not be taken to be representative of the entire population.

Because of these specific locations, the study’s generalizability was limited even further (Creswell, 2013). This limited generalizability thus placed the study’s emphasis on one general local, which bound its findings to that specific local and these educational institutions. For this reason, the findings may not be applicable to the perception of all community colleges or high school key stakeholders in the state or across the country in regard of their understanding of the state of developmental education or the challenges of a collaborative effort to alleviate the need for remediation on the college level. In addition, the findings, which constitute implementation of changes, may not be applicable to all community colleges and high schools across the state or across the country. Although Yin (2014) warned against using a single case study as a sample to address a larger or universal population or problem, Stake (2010) provided merit of its use. He stated, “Case studies will often be the preferred method of research because they maybe epistemologically in harmony with the reader’s experience and thus to that person, a natural basis for generalization.” With this qualification in mind, the researcher found that although this case study was generalized as far as local and specifications, it still had bearing on the body of literature available concerning the collaborative effort of postsecondary and secondary educational institutions in terms of promoting college readiness prior to high school graduation.

An additional limitation in this study that affected the interpretation of the qualitative data was the perspective of the researcher. This researcher had direct involvement with the teaching of developmental English on the two community college campuses and worked directly with students who were identified as at-risk at one of the high schools identified in the study. This teaching
involvement and direct contact with some administrators, faculty, and counselors may have introduced an instance of bias based on the researcher’s prior experiences and personal perceptions. For this reason, the researcher understood the need to re-evaluate the context of insider status in order to minimize biases and considered inviting another person into the study for the sole purpose of conducting college and high school interviews at schools the researcher was directly involved. This individual, if selected, would also transcribe and code data from these specific institutions. This person would also assist in keeping observation notes during the Phase III focus group session that did not involve these institutions. After consideration, the researcher determined that a second person was not necessary to carry on the interviews or focus group sessions.

**Validation**

The use of multiple sources of data is essential to validate the conclusions of the qualitative research design. Gathering information and multiple sources of data to support inferences is the essence of validation. According to Harrison, MacGibbon, and Morton (2011), solid qualitative research requires rich description along with in-depth interviews and discussions in order to obtain quality data. In this study, consistency and credibility was assured through accurate transcription of data using Transcriber AG for Mac, careful review of recorded sessions using Garage Band for Mac Pro, member checks, close attention to the researcher’s reflective commentary, and the triangulation of collected data. In addition, the analysis included a rich description of the setting, the study's participants, and quotes from questionnaires, interviews, and focus groups.

**Credibility**

Yin (2014) described four essential principles of data collection to ensure that the research is credible, dependable, and valid. First is the use of multiple sources of data. In this study, the researcher triangulated the data through online questionnaires, interviews and focus groups. The
instruments of data collection assisted the researcher in providing all evidence. Yin (2014) also determined that the second essential to ensuring credible and valid data is the creation of a case study database that collects the data and a separate database that compiles and organizes the data to include other documents from the research. Data from this study was compiled electronically using Microsoft Word and NVivo 12 for Mac. The researcher transcribed all interviews, focus group sessions, and written field notes. These transcripts and field notes were uploaded to NVivo 12 for Mac upon completion for proper coding and analysis.

**Dependability**

A third principle of data collection, according to Yin (2014) is maintaining a chain of evidence to increase the reliability, or dependability, of the information collected in a case study. The ability to follow the study’s conclusions back to the research questions, then back to the conclusions again assures that the study possesses high construct validity that will heighten the overall quality of the case study. In this study, the researcher great care to process all findings and methodically record all evidence to ensure that no data was lost or left out due to perceived bias.

The fourth principle of data collection is using electronic data sources carefully. Electronic data sources in this study were limited to the results of the anonymous online questionnaires. The online questionnaires were created and distributed using the Qualtrics software program. The results were compiled, analyzed, and documented with this electronic information-gathering tool. Once the data from this program was gathered and analyzed, it was then included in the researcher’s study.
**Ethical Issues**

The researcher understood the ethical principles associated with qualitative research. Therefore, prior to contacting participants, the researcher secured permission from the superintendents of the school districts and the community college president to conduct the study. Each of these individuals was sent a copy of the IRB approval letter from Concordia University. Once these individuals gave their approval of the study in their schools, the researcher contacted participants. Accepting responsibility for ensuring that the participants in this study received full disclosure concerning their rights and their confidentiality, the researcher provided the participants with informed consent forms. The participants were asked to sign the informed consent forms that identified the purpose of the study, their voluntary roles in the study, and the benefits or risks involved in the study (Ritchie, Lewis, Nicholls, & Ormston, 2013). The consent forms also identified participants’ rights to withdraw from the study at any time and their rights to review the study and its findings once the study was complete.

To ensure confidentiality, the names of the participants were removed from all research documents and research correspondence. Questionnaires, interview transcriptions, field journal notes, and all correspondence were numerically and alphabetically coded in order to keep participant responses and participant actions confidential. The names of all educational institutions involved in the study were kept confidential through the numerical and alphabetical coding system. Once the study was completed and research findings had been documented and reported, the participants were debriefed as to the study’s results. All documents and data (both digital and written) was collected and will be properly stored for a period of no more than three years. After the 3-year period, the data will be destroyed.
Chapter 3 Summary

According to Thompson (2014), a major concern in postsecondary education is that the students who are enrolled in these programs are at risk from the very start of their college career and have a far less chance of earning a degree or a certificate than the students who enter college on the degree track. This concern can be seen in colleges and community colleges across the country. For example, in 2012, 52% of Mississippi’s high school graduates were not prepared for college coursework, and the study confirmed that only 13% of that 52% will actually continue their college career to attain a degree (MEPC, 2012). According to ACT (2017), Mississippi fell far below the nation’s average of students who met ACT’s college readiness benchmarks in the core courses of Math, Reading, and Science for the academic term 2017. This chapter outlined the details for a qualitative case study that sought to understand how educational stakeholders perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi. The researcher used data from questionnaires, interviews, and focus groups to provide triangulation and support for data findings to gain an understanding of this problem.
Chapter 4: Data Analysis and Results

Introduction

The purpose of this qualitative study was to explore how educational stakeholders perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi. This problem was to be studied from the perspective of 24 educators of varied years of educational experience, academic vocations, ages, and ethnicities. The instruments used in this study included survey, questionnaires, and focus group sessions. The study was conducted in an area of Central Mississippi through eight sites. The eight sites included four high school and four community college campuses. The high schools were located in four school districts in Central Mississippi that are within close proximity of each other. These high schools were individually identified as being located in suburban, rural, fringe rural, and urban areas of the state of Mississippi. The four community college sites were branches of a key community college in close proximity to the high schools. The high schools varied in student populations, in student-teacher ratios, in college readiness indexes, and in English and reading proficiency scores.

The total student population for these four high schools for the 2017–2018 academic school year was 5,045 students. Of those 5,045 students, the high school with the highest college readiness index showed 20.1%, which fell slightly below the nation’s college readiness index by 1.51%. The other three schools showed college readiness index percentages of 6.6%, 13.0%, and 16.9%, which indicates that the remaining three high schools also fell below the nation’s college readiness index: 4.6%, 8.51%, and 14.91%. In this study, initially, 12 participants were selected from 384 individuals from the four high schools who are administrative, faculty, or guidance staff actively involved in student academic endeavors. In addition, 12 participants were initially selected from the selected community colleges and included administrative, faculty, and guidance
staff involved in developmental education English courses. Because of conflicts in time and scheduling, four of the participants and one of the community college branches and one high school participant withdrew from the study. As a result, the number of participants changed from 24 to 20.

This study used a qualitative single case study research design to answer the research question: How do educational stakeholders perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi?

Chapter 4 is divided into five sections that include the descriptive data, the data analysis procedure, the summary of findings, a presentation of the study’s results, and the chapter summary. The Descriptive Data Section of this chapter presents a description of the schools represented in the study and the educators used for the study. The Data Analysis Section of this chapter gives a brief but detailed review of the methodology selected for this study and explains how the methodology leads to the analysis used to examine the data. The Summary of Findings gives an overview of the data and information and serves as an introduction to the section entitled Presentation of Data and Results. Finally, the chapter ends with The Chapter Summary that serves to recap the key study findings.

**Descriptive Data**

The participants in this case study included the administrative faculty, guidance counselors, and teachers directly involved in the curriculum, curriculum placement, and instruction at the schools selected for the study. A purposeful sampling approach was used to select the participants for this study. Purposeful sampling is defined as a non-random sampling method. In the purposeful sampling, the members of the selected population are selected because of their knowledge and experience in the phenomenon being studied (Creswell & Plano Clark, 2011). In
addition, the study utilized the convenience sampling approach. With convenience sampling, participants were selected because they were accessible and available because of their proximity and their willingness to participate in the study (Etikan et al., 2016). According to Yin (2016), the use of purposeful sampling allows the researcher to obtain a comprehensive understanding of the participant’s views on the research topic and therefore broadens the researcher’s understanding of the topic. Purposeful and convenience sampling involves less time as well as cost and effort to the researcher (Creswell & Plano Clark, 2011).

The high schools selected were specifically chosen for this study based on their 2017 college readiness indexes, their proficiency percentages in the areas of English and math, and their high school rankings. Schools were selected based on students’ performances on ACT tests, on subject area tests, and in final grades in the core subjects of English, mathematics, and reading. The study was conducted in an area of Central Mississippi through eight sites. The eight sites initially included 4 high school and 4 community college campuses. The high schools were located in four school districts in Central Mississippi that were within close proximity of each other. These high schools were individually identified as being located in suburban, rural, fringe rural, and urban areas of the state of Mississippi. The four branches of the Mississippi community college included in the study were selected because of their proximity to the high schools selected for the study and because of the number of students from each of the high schools that choose to attend the different branches of this 2-year technical and career community college. One branch of the community college was dropped from the study because of difficulties in coordinating the time needed for the study.

The participants in this study were selected according to the participant’s role at the Mississippi educational institutions included in the study and according to their willingness to participate. According to Bohnet (2016), the research sample in qualitative research provides the
study with the participant’s “assumptions, perspective, and interpretations on the study topic, providing the data for analysis” (p. 63). This study was conducted using a small sample that included community college administrative officers, student advisors, and department heads and faculty members who were selected from the four branches of the Mississippi community college included in the study. The sample also included high school administrators, department heads, classroom instructors, and school guidance counselors from the four Mississippi high schools identified in the study. Twenty-four educators, a maximum of three from each institution, were initially chosen for the study; however, only 20 actually participated in the Phase I Qualtrics Survey and the Phase II Face-to-Face Interviews.

In this study, the 11 high school educators chosen as participants were selected from 384 individuals from three of the four high schools. They included administrative, faculty, or guidance staff actively involved in student academic endeavors. In addition, the remaining nine participants were selected from the selected community colleges, and they included administrative, faculty, and guidance staff involved in developmental education English courses. In order for the researcher to secure permission to conduct the study, letters were sent to the superintendents of the perspective high schools and to the president of the community college (see Appendices F and G). Once permission for the study was granted, the potential participants in the study were contacted by e-mail or by regular mail. In the letter of invitation, the researcher informed participants of the purpose of the study and ensured that participant anonymity would be kept throughout the study and its publication (see Appendix A). The letter of invitation also provided the participants with information concerning the stages of each portion of the research process. Included in this initial letter of invitation to the study was a letter of informed consent (see Appendix B). The informed consent document (ICD) included a confirmation of researcher/participant confidentiality. Because of scheduling conflicts, four participants withdrew from the study, which reduced the
sample size from 24 to 20 participants who participated in the Phase I Survey and Phase II Face-to-Face Interviews. Twelve of those 20 participants were selected to be a part of the Phase III Focus Group phase of the study. The participants included in the study were educators whose experiences ranged from 10 to 31-plus years of experience.

Table 1

<table>
<thead>
<tr>
<th>Demographic Data for the Individual Interview Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Occupation</td>
</tr>
<tr>
<td>N = 20</td>
</tr>
<tr>
<td>Percentage Breakdown</td>
</tr>
<tr>
<td>Academic Occupation</td>
</tr>
<tr>
<td>Secondary Administrator</td>
</tr>
<tr>
<td>Secondary Guidance Counselor</td>
</tr>
<tr>
<td>Secondary Teacher</td>
</tr>
<tr>
<td>Postsecondary Administrator</td>
</tr>
<tr>
<td>Postsecondary Guidance Counselor</td>
</tr>
<tr>
<td>Postsecondary Teacher</td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Institution Level</td>
</tr>
<tr>
<td>High School</td>
</tr>
<tr>
<td>Community College</td>
</tr>
<tr>
<td>Years of Teaching Experience</td>
</tr>
<tr>
<td>0–10 Years</td>
</tr>
<tr>
<td>11–20 Years</td>
</tr>
<tr>
<td>21–30 Years</td>
</tr>
<tr>
<td>31 Plus Years</td>
</tr>
</tbody>
</table>

Upon acceptance of the invitation to participate in the study, the 20 educators completed the Phase I early assessment questionnaire that was administered as a Qualtrics Survey (Appendix C). The survey used consisted of 50 questions: 43 multiple-choice, Likert-scale questions and 7 brief open-ended response questions designed by the researcher. Included in the survey were 7 questions that disclosed the participant’s demographic data (see Table 1).

Once the survey was completed, an individual interview was scheduled to collect data to answer the research question that guides the study. The face-to-face interviews were scheduled, and the participants were given a copy of the 20 questions that would guide the semistructured interview (see Appendices D and E). The interviews were held in the researcher’s classroom after
school at times convenient to the participants. Interviews were initially recorded using MacBook Pro’s Photo Booth. The interviews were conducted within a 45-60-minute time frame. The researcher scheduled 4 interviews per afternoon over a 5-day time period, which resulted in a total of 9.45 hours. Transcripts were completed within two days of the interviews and given to participants for member check.

**Data Analysis Procedures**

The initial data was gathered using Qualtrics software and coded by the researcher using Saldaña’s coding techniques, which provided data from the Phase I Survey. From the survey, the researcher identified two important points concerning the 20 participant’s perceptions of their institution’s ability to provide remedial help for students who have academic deficiencies. The first key point identified was the participant’s perception of their institution’s overall ability to meet the needs of the students with academic deficiencies. This point also included the participant’s perception of the performance of teachers, administrators, and counselors in meeting the needs of these students. The points were identified under the broad categories of Confident and Slightly Confident; the results can be seen in Table 2. The initial or first cycle coding of these questions revealed that participants were confident in their individual institution’s ability to meet the needs of students with developmental deficiencies. The coding revealed 71 confident responses. The coding also revealed 29 slightly confident responses. The coding also revealed that the participants were less confident in their own ability to meet the needs of these students.
Table 2

Perceptions of Confidence of Academic Support

<table>
<thead>
<tr>
<th>Survey Questions</th>
<th>Confident</th>
<th>Slightly Confident</th>
</tr>
</thead>
<tbody>
<tr>
<td>How confident are you that your school is providing students who have developmental deficiencies the academic support that they need?</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>How confident are you that your teachers are helping students who have academic deficiencies to understand curriculum content?</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>How confident are you in your school’s ability to meet student’s learning needs?</td>
<td>18</td>
<td>2</td>
</tr>
<tr>
<td>How confident are you in the academic counselor’s ability to help establish a developmental plan for students who are facing academic challenges?</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>How confident are you in your ability to help students overcome their reading/learning difficulties?</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Total Responses</td>
<td>71</td>
<td>29</td>
</tr>
</tbody>
</table>

The second point identified from the first round of coding of the Phase I Survey questions was the frequency of academic interventions, planning, and support for students with academic deficiencies from teachers, administration, and academic counselors. The points were identified under the broad categories of Weekly/Monthly and Every Few Months/Almost Never, and the results can be seen in Table 3. The coding revealed that the participants perceived that in their institutions, the academic staff frequently engaged in academic interventions to support the needs of students with academic interventions. Of the 118 responses, 73 responses revealed a positive Weekly/Monthly frequency of academic interventions in the participant’s institutions with only 45 identified negative responses of Every Few Months/Almost Never, and one inconclusive participant response. The coding revealed that the participants perceived a need for more administrative interventions and classroom visits in order to augment additional support of students with academic deficiencies.
Table 3

*Perceptions of Frequency of Academic Interventions*

<table>
<thead>
<tr>
<th>Survey Questions</th>
<th>Weekly/Monthly</th>
<th>Every Few Months/Almost Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the past year, how often has your school provided remediation to students</td>
<td>18</td>
<td>2</td>
</tr>
<tr>
<td>identified as having academic difficulties?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How often does your school help students with academic difficulties to engage</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>in learning opportunities outside of the classroom?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In the past year, how often have you helped with academic remediation?</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>In the past year, how often have administrators visited the classrooms to</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>address academic interventions?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How often do academic counselors meet with teachers concerning students</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>who are having academic difficulties?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How often do academic counselors meet with instructors concerning students</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>who have problems with academic courses?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Responses</td>
<td>73</td>
<td>45</td>
</tr>
</tbody>
</table>

A second round of coding was done for the Phase I Survey by doing a simple read through of the responses to the last 10 questions of the survey, which questioned the participants on their perception of what academic changes were needed to improve the college readiness of students with academic deficiencies and their perception of when remedial or developmental education should begin for students who have academic deficiencies. Table 4 shows that of the 20 participants who took the survey, 9 felt that early intervention could lead to positive change in the college readiness of students who have academic deficiencies prior to college entry. Six participants, however, determined that the current curriculums with increased remediation and increased grammar usage and writing components practices, if implemented correctly could result in college prepared high school graduates.
Table 4

*Perceptions of Needed Academic Changes for College Readiness*

<table>
<thead>
<tr>
<th>Early Identification</th>
<th>Remediation</th>
<th>Writing Grammar</th>
<th>More Computer Based Learning</th>
<th>Differentiated Academic</th>
<th>No Changes</th>
<th>More College Prep Courses</th>
<th>Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>20</td>
</tr>
</tbody>
</table>

*Note.* Survey question: What academic changes are needed to improve college readiness of students with academic deficiencies?

As a result of this read, the researcher identified two themes that warranted further study through the Phase II Face-to-Face interviews and the Phase III Focus Group Sessions. The themes were *remediation* and *early identification/intervention*. In addition, in response to the question, which queried when remedial or developmental education should begin for students with academic deficiencies, the Qualtrics Survey determined that 11 of the 20 participants indicated that remediation should be on-going grades 7-12; whereas 2 of the 20 determined that remediation is best done in grades 11-12. Only 1 of the 20 indicated that the remediation was best in grades 9-10 as seen in Figure 2.

![Remediation and Developmental Course Beginnings](image)

*Figure 2.* Remediation and developmental course beginnings.
The Phase I survey only offered four categories for response to the question given; therefore, 6 participants did not respond to the question in the survey; however, they addressed this issue in the Phase II Interviews by indicating a need for identification and remediation beginning as early as pre-school or elementary school.

**Face-to-face interview and focus group coding and analysis.** The data from the 20 question Phase II Face-to-Face Interviews and Focus Group Sessions were recorded using Garage Band for Mac Pro. The researcher identified the high school participants by a specified number and the acronyms HST, HSA, or HSC, which identified high school teachers, administrators, and counselors. The community college educators were identified by the acronyms CCT, CCA, or CCC for the sake of confidentiality. Transcription was done using TranscriberAG for Mac and by hand in Microsoft Word by the researcher. Once the data was transcribed, data was hand delivered to participants or sent to the individual participants through e-mail within three days of transcription for member check. After the transcriptions were checked and revised for minor oversights, the researcher did the initial coding by hand by doing a detailed read through of each transcription. Words and phrases were highlighted and noted in the researcher’s coding notebook. The initial coding of the interviews and focus group sessions by hand allowed the researcher to become familiar with underlying themes and relevant ideas identified from the transcripts. Five themes that emerged from the reading were *remediation, early identification, basic skills (writing/grammar), technology, and assessment.* The themes of *remediation* and *early identification* were also seen in the Phase I Survey. Once the researcher finished this initial hand coding, the transcripts were uploaded to NVivo 12 for Mac for software coding.

**NVivo word frequency analysis.** Using NVivo 12 for Mac, a word frequency was run, to further explore the themes that emerged in the Phase I Survey. The initial read through of the Phase II interviews and the Phase III Focus Group Sessions was conducted to discover other data.
trends. The researcher determined that this step would lead to a better understanding of how community college and high school participants perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi. When initiated, the word frequency query showed that the word remediation appeared 147 times during the interview and the focus group session transcripts; the word early (identification/intervention) appeared 121 times, basic (skills) appeared 68 times, technology appeared 44 times, and assessments appeared 36 times. In reference to the word basic (skills), the researcher noted that the word frequency query also showed that the word writing appeared 117 times and grammar appeared 49 times in reference to basic skills needed for student academic success. Reviewing the transcripts line-by-line, and examining the queries and open coding done using NVivo 12 for Mac, the researcher noted that a total of 466 subcategory nodes were created in 22 reports: community college interview questions (10 files with 207 subcategories), high school interview questions (10 files with 192 subcategories, and focus group questions (2 files with 67 categories). All reports were closely reviewed, and data were analyzed and organized according to the data, as it appeared, the researcher’s personal judgment, and the understanding of the terms and their meanings and relevance to the research question. Noting the subjective nature of coding and understand that interpretation is strongly impacted by the educator’s experiences, the researcher was able to make a connection between the discovered data and the research question.

**Summary of Findings**

**Early identification, interventions, and implementation.** During the Phase II Face-to-face interviews, the researcher asked both high school participants (HS) and community college participants (CC) when the implementation of remedial and developmental education should begin. Both high school and community college participants agreed that remediation should be
implemented early in a student’s academic career and provided an explanation of how implementation can be achieved. High school participant HST #7 determined, “We need to identify them early and provide classes that target their weaknesses. We can also require students who fail or complete a class with a certain average to take remedial classes the next school year.” Participant HST#4 reiterated, echoing a previous response, “Once again, there should be a return to basic reading, writing, and grammar skills in elementary and middle schools. There should be also more rote memory in lower grades of fundamental knowledge-based skills.” Community college participants voiced similar views.

Participant CCT#5 responded, “Implementation of remedial and developmental education should begin as early as Kindergarten and move on through grade 12.” Participant CCT#6 commented, “Implementation of developmental and remedial education should without a doubt begin before students get to college. As I stated earlier, early intervention will alleviate the overwhelming need for so many students being placed in developmental courses.” Participant CCT#7 clarified, “It should begin in pre-school and move on through high school, and if need be after 13 -15 years of school on into community college…the education process is in itself ongoing.” Participant CCA #1 acknowledged that teacher identification is a key component of early identification and remediation. In acknowledgement of the need for early identification and intervention, CCA#1 responded, “I believe that remediation should begin at the earliest stage of a student’s education when an instructor recognizes that a student has deficiencies that need to be eliminated.” The researcher noted that in discussing remediation, it was often discussed in terms of implementation of identification and intervention methods early in a student’s academic career.

The data indicated a clear connection between early identification, the implementation of basics skills usage in grammar and writing, assessment, and ongoing remediation to ensure student college preparedness. It also identified the participants’ views of technology as a tool for student
success in both a positive and negative light. The data further determined that the educators at both the high schools and the community college branches saw a need for the implementation of developmental and remedial interventions prior to a student graduating from high school; however, the data also indicated that the need was perceived to be greater prior to high school attendance. The data and the full results are found in the Results section of this chapter.

**NVivo coding analysis.** The data from the transcripts of the face-to-face interviews and the focus group sessions were uploaded to NVivo 12 for Mac. Data was coded systematically using the themes that the researcher found prevalent. Using NVivo, the researcher read each transcription and established parent nodes for the themes identified from the initial read though coding and the word frequency charts. The parent codes generated in the first round of coding allowed the researcher to further categorize the data. The researcher created the parent node *Early Identification/Intervention*. The initial coding of this node produced 120 references. During this coding, the researcher created five child nodes, which developed subthemes that were significant to the research question and the parent node. These nodes included: (a) Identification/Intervention Preschool –Elementary, (b) Identification/Intervention Middle School, (c) Identification/Intervention Grades 9 and 10, (d) Identification/Intervention Grades 11, 12, and Post College, and (e) Identification/Intervention at an unspecified time. Table 5 shows the number of references coded in each node.
Table 5

*Theme I Early Identification Node Reference Chart*

<table>
<thead>
<tr>
<th>Specific Grade Level</th>
<th>Number of References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-School to Elementary</td>
<td>31</td>
</tr>
<tr>
<td>Middle School</td>
<td>7</td>
</tr>
<tr>
<td>9th–10th Grade</td>
<td>7</td>
</tr>
<tr>
<td>11th Grade and After</td>
<td>2</td>
</tr>
<tr>
<td>Unspecified Time Early in Academic Career</td>
<td>73</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>127</strong></td>
</tr>
</tbody>
</table>

The coding indicated that there were 31 references to early identification and interventions as early as pre-school and elementary school. According to Jung, McMaster, and del Mas (2017), children who are at risk require early intervention, especially in the areas of reading, writing, and spelling. They also contend, “Children who are at risk or identified with academic disabilities require high-quality, effective, interventions to experience success in school” (p. 289).

In the Phase III Focus Group sessions, when participants were asked when intervention should begin and where should the gap in academic deficiencies and academic weaknesses first be addressed, a general consensus showed that participants saw a need for identification and intervention early on in a student’s academic career; however, the researcher’s review of the participant’s remarks determined that there were mixed-thoughts as to the appropriate time for these early interventions to take place. Community College Participant CCT#7 remarked:

I think the cause of so many students not being college ready is early developmental education. By that, I mean a focus on a good fundamental background when kids are around ages 2 and up. This, of course, starts in homes and in pre-schools. I believe that once kids get to kindergarten, they should already have some basic skills in place, and from that point public education builds and adds to the students’ knowledge base. We have too many kids beginning school with a deficit, and by the time they get into public school,
which is now designed to get schools funded based on test scores, those students who are already at risk get shoved further and further away from the goal of academic success. Schools, then for the sake of the numbers move those kids forward, and then they eventually become the “great number of students who are not college ready.”

Participant HST#7 responded to the question from personal experience. She stated:

I strongly believe that for intervention, the earlier the better. It may very well begin at home. For example, my four-year-old has a late birthday, August 28th, so we had to decide whether we push him or do we keep him back. He’s four. I was already noticing the immaturity and the lack of . . . he just doesn’t care (and I am afraid that that is an attitude that we are going to have for a while). But so we kept him back in three-year-old preschool, and we have seen a tremendous growth in him, just in a couple of months, so it was definitely the right choice. So, with that being said, the earlier the better; however the question is how do you approach everyone, or get everyone to this stage…what steps do you take to continue to monitor that growth and to continue to …I guess provide rigor and relevance along the way. If we had the answer, it would be fabulous!

Some other responses to this question are indicated in Table 6.
**Table 6**

*Early Identification/Intervention (Focus Group Session)*

<table>
<thead>
<tr>
<th>Teacher comments [sic]*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High School Teachers</strong></td>
</tr>
<tr>
<td>• HST#3: I kind of think that there should be something like the 3rd grading reading gate, something, maybe around fifth or sixth grade, before they hit that middle school time, or maybe seventh/eighth grade before they are in high school…</td>
</tr>
<tr>
<td>• HST#4: I think by 3rd grade. So, in 1st and 2nd grade, they are prepared, so that by 3rd grade level, and if they are not on 3rd grade level, we have to start working with them then.</td>
</tr>
<tr>
<td>• HST#7: Oh yes! I think it starts early. If you wait until a kid is in high school to determine what their deficiencies are and where they cannot succeed, I think we have already lost them.</td>
</tr>
<tr>
<td><strong>High School Administrators &amp; Counselors</strong></td>
</tr>
<tr>
<td>• HSC#1: I do not know what plan of action can be taken other than early detection, early intervention, and early awareness of requirements.</td>
</tr>
<tr>
<td>• HSC#2: Early identification is imperative to help students with academic deficiencies. Our district does a great job at the elementary level with identifying students in need of additional academic or behavioral support through interventionist teachers.</td>
</tr>
<tr>
<td>• HSA#1: Elementary school. The earlier deficiencies are found the better chance of correcting issues.</td>
</tr>
<tr>
<td><strong>Community College Teachers</strong></td>
</tr>
<tr>
<td>• CCA#1: I believe that the gap must be addressed at the very onset of one’s introduction to education. Waiting until late elementary or early middle school is far too late to recover the lost opportunity to rectify learning deficiencies.</td>
</tr>
<tr>
<td>• CCC#1: As early as possible! As early as pre-school.</td>
</tr>
<tr>
<td>• CCT#3: I would think, and this may sound kind of strange, but we should begin before we know they are deficient or weak.</td>
</tr>
</tbody>
</table>

*Note: Comments are shown as submitted with teacher inflections and grammar mistakes intact.*

During the focus group sessions, the researcher also asked the participants when and where should the gap in student academic deficiencies and academic weaknesses first be addressed. The participants contended that early intervention was indeed crucial; however, there were several factors to consider. Participant CCT#3 stated:

I would think, and this may sound kind of strange, but we should begin before we know they are deficient or weak. We should go in at the elementary level and make them do some writing that is probably a little more advanced for them and see what they come up with. It is so easy to study run-ons, fragments, and all of these major errors, and be able to see them in a sentence, but when you look at your own writing, it does not translate. It is hard to teach grammar and to have students input correct grammar into their writing. Of course, who in the elementary world has time to look at individual writing samples and to
conference with them, I get that! So, I don’t know . . . for sure when you first see them, any kind of deficiency, but maybe before yet know it, or pretend that they do, and do some work there.

Another participant observed that along with early identification and intervention, there needs to be correspondence and collaboration between teachers at different grade levels. Participant HST#1 commented:

I think that we really do lose them in the seventh grade. I feel we need to meet with the language arts teachers at junior high and the middle schools and talk about what the expectations are for high school and college. They don’t seem to see the big picture. The textbook is good but not the only source. Maybe all teachers 7–12 would benefit from a workshop on SREB Readiness. I would love to head that up. It is not good that as educators, we watch more and more children get lost and feel academically inadequate. We need to do something to stop the cycle.

In response to this comment, participant HST#10 voiced:

I agree, the cycle needs to be stopped. And for us as educators, identifying the weaknesses early is important. We need to challenge the students, yes! Engage the students, yes! Let students use the computers, yes! Somewhere there has to be a teaching of the basic skills. Students need to know that 2 + 2 could not be 5 and why. Without the basic skills, they will be behind. Gaps should be addressed when the deficiencies are found. I do not have an answer for how the deficiency is to be addressed or how a school or a teacher can teach to every learner’s ability. There is the challenge.

Participant HSC#2 noted that the gap can be identified early, and remediation and intervention must begin when the gaps are seen, and state officials are now seeing the need. The participant stated:
Yes, I agree . . . the younger the better, and I think that people bigger than us are coming to realize this as well because, now in education there is a lot of push for Pre-K throughout the state especially. So, I do think that we are on the track to helping those students better, but we won’t see the impact of this push for about 12 more years. One day, we will see!

A parent node was created for the second theme identified in initial coding, remediation. This parent code produced 99 references. Remediation is closely connected to the early identification of students who are at risk and to the establishing of interventions to ensure their academic success. However, according to Mazzariello et al. (2018), “Remediation as it is traditionally taught has had, at best, modest effects in improving outcomes for students who enter college with weak academic skills” (p. 2). The participants in this study voiced their perceptions concerning remediation and its impact on student academic success and college preparedness. Several identified intervention strategies that could possibly positively impact student preparedness that deviate from the standard remediation practices. For example, participant HST#10 noted that remediation could not occur until the student’s need is adequately determined. She stated,

The first thing I think needs to be done is to identify exactly what skills are lacking—where are the gaps in the child’s learning. A classroom teacher does not have the skills nor the time to individually see where each child is lacking. They know the child is missing skills but does not know how nor have the time in a 90 minute classroom with 25 other students to help develop that skill. This is where computers could be used – I do not know how this would be implemented into the school day, but if the student could work on specifically the skill they have missed, then improvement would appear. I have always felt giving challenging material to students will help them increase their abilities. An athletic coach ups the weights the kids are lifting to empower them, a coach plays a more talented team
and then watches those films, shows the kids where they are weak and makes plan to help them grow to improve and grow stronger. Unfortunately, teachers in a classroom do not have a camera that can show students their weaknesses. All they have is a red pen and a grade book and the “F” failing grade. Many students feel defeated and because they have continued to fail a certain grade have the mentality that they cannot pass the subject so why try. Computers could be used to help close those gaps, but again the student has to be willing to go through the program.

Participant CCT#3 added,

Well, I am not sure when remediation should begin, exactly. However, I would think that it would be most beneficial, right there in the ninth grade. That is a major benchmark. Through elementary, they start learning things grammar, things get more difficult and complicated, but you still are going back to basics, and most students can kind of get in there, and you (teachers) feel like they (students) are making progress. But, something with ninth grade, I don’t know, you start to see things are lacking, other students are getting it and progressing. You know, I think you see it again at each grade from there. It’s been a long time since I have taught high school, but that is what I remember! You look at them and they seem more mature, in their actions, from the seventh graders or eighth graders, but somehow you see that they can’t write or they can’t express in writing. In the seventh and eighth grade, they looked like they were going to be able too. Yes, I would say ninth grade is a telling time, and a good time to begin active remediation.

Other participants voiced their thoughts on when and how remediation should be approached for students who are determined to be at risk as seen in Table 7.
Table 7

Perceptions on Remediation prior to College (Face-to-Face Interviews)

<table>
<thead>
<tr>
<th>Teacher comments [sic]*</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School Teachers</td>
</tr>
<tr>
<td>• HST#7: In my school, we use classroom assessments as well as CASE testing to determine student achievement and target students in need of remediation. Many times, my students that need remediation are not showing progress in class and test poorly.</td>
</tr>
<tr>
<td>• HST#10: Students are identified according to their lack of progress. We offer remediation in areas of academic weakness; we offer teacher and peer tutorials. We also offer credit recovery courses and study halls geared towards allowing students time to catch-up on skills or classes that they have had trouble.</td>
</tr>
<tr>
<td>• HST#5: Our school has developed a system where students who are in the lower 25% or who have failed state tests go for remediation on alternate days. There is also the standard SPED criteria teachers follow such as IEPs. Unfortunately, there is no mandated or required tutoring for individual students in a traditional classroom setting; however, there should be something in place for them too!</td>
</tr>
<tr>
<td>High School Administrators &amp; Counselors</td>
</tr>
<tr>
<td>• HSA#1: In our high school, we utilize our homeroom time for remediation. We split our students up based on the specific area that they are struggling with. Our teachers are placed in spots where they are strongest. Perhaps, this can approach to remediation can be expanded somehow in the schools.</td>
</tr>
<tr>
<td>Community College Teachers</td>
</tr>
<tr>
<td>• CCA#9: I believe that early identification of at risk students is needed plus one-to-one tutoring/remediation; I believe that making writing relevant and interesting with topics suited for today’s youth is also key to motivating learning interests. Also, there must be follow through at all grade levels.</td>
</tr>
<tr>
<td>• CCT# #3: I believe remediation should begin when a grade begins to go down no matter the age or school level.</td>
</tr>
<tr>
<td>• CCC#2: Identify students in need earlier, provide remediation and developmental classes in high school that provides lecture, hands on teaching and learning strategies, useful intervention and remediation strategies, consistent writing with feedback, providing of tutoring and academic interventions using technological tools.</td>
</tr>
</tbody>
</table>

*Note. Comments are shown as submitted with teacher inflections and grammar mistakes intact.

Implementation and Intervention. According to Complete College America (2012), the need for college remediation can be reduced by the implementing of common standards for reading, writing, and mathematics in high school. The participants in this study indicated differing views on how remediation strategies can be implemented at the different levels of a student’s academic growth. In order to determine, the participants’ thoughts on this, two child nodes were created for the parent node remediation. They were labeled implementation and intervention. The child node implementation produced 64 references. The child node intervention produced 71 references. Indicative of the differences of when students should be identified and when remediation should begin, implementation steps and intervention strategies also differed among both high school and college participants (Table 8).
### Table 8

**Perceptions on Implementation Steps and Intervention Strategies**

<table>
<thead>
<tr>
<th>High School Teachers</th>
<th>Teacher comments [sic]*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• HST#4: I think students would benefit from more writing and more reading skills drilled as a part of core curriculum. In addition, there should be more critical thinking skills emphasized rather than the commonly held Google it and use it strategy of learning.</td>
</tr>
<tr>
<td></td>
<td>• HST#10: One on one individualized instruction sometimes is best as one is able to isolate the issues and target those instead of working in generalities.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>High School Administrators &amp; Counselors</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• HSA#1: Differentiated instruction is the best way to reach the needs of all students.</td>
</tr>
<tr>
<td></td>
<td>• HSC#2: Model high school classes to be set up more like college classes and rely more on student initiative and responsibility while in high school so the supports are available if they do have problems.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Community College Teachers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• CCT#2: We should identify students in need earlier, provide remediation and developmental classes in high school that provides lecture, hands on teaching and learning strategies, useful intervention and remediation strategies, consistent writing with feedback, providing of tutoring and academic interventions using technological tools.</td>
</tr>
<tr>
<td></td>
<td>• I believe that early identification of at risk students is needed plus one-to-one tutoring/remediation; I believe that making writing relevant and interesting with topics suited for today’s youth is also key to motivating learning interests. Also, there must be follow through at all grade levels.</td>
</tr>
</tbody>
</table>

*Note. Comments are shown as submitted with teacher inflections and grammar mistakes intact.

In response to the question concerning the implementation of a plan to address students who have academic deficiencies, participant HST#8 acknowledged:

If I could implement a plan, I would make sure that students who fail subjects are allowed to take summer school; however, I would ensure that these classes reflect the rigor and expectations of classes in the regular school year. I would also make sure that during the regular school term that assessment matches up with the curriculum standards. I believe that too much weight on completion grades allow students to pass even though they have not met the standards. I also would ensure that students who are at risk are identified early and provided classes that target their weaknesses. I would also require that students who fail or complete a class with a certain average to take remedial classes the next school year.

Participant HST#6 saw intervention and implementation as a matter of student placement and learning opportunity, she noted:
There are so many possibilities! I think that in looking for intervention methods and implementation of those methods, I would focus on career assessments and really try to identify what students are interested in doing for the rest of their lives. Some students would benefit more from on-the-job training as a teenager that would then help them transition into the working world. Not every student needs the traditional high school diploma. So I think I would use career assessments to funnel students into different tracks, similar to the way MDE has redesigned the high school diplomas.

High school participant HST#5 maintained that an ideal strategy for implementing successful remediation for students with learning deficiencies would entail offering “more remedial time besides 25 minutes every other day during homeroom.” She went on to emphasize, “I believe students work better with spiral learning and a more intensive and rigorous schedule. This plan should definitely be put in place the years immediately prior to college entrance.”

One of the intervention tools mentioned frequently in the study was technology. The NVivo Word Frequency analysis revealed that technology appeared 44 times. In creating a parent node for technology, the researcher also created two children nodes for technology. One of the child nodes was positive perceptions, and the other was negative perceptions. The parent node for technology revealed that 11 files identified 29 references to technology. One of the two child nodes created 6 files showed 11 references to negative perceptions of technology as a tool for remediation. The second child node revealed 9 files with 16 references that acknowledged positive perceptions of technology as a tool for remediation of students with academic deficiencies at risk of not being college ready at graduation. Table 9 and Graph 2 outlines the outcomes of the positive versus negative query concerning teacher perception of technology as a tool for remediation of students with academic deficiencies.
Table 9

Teacher Perceptions of Technology as a Tool for Remediation

<table>
<thead>
<tr>
<th>Teacher Participants</th>
<th>Positive Comments</th>
<th>Negative Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School Teachers</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>High School Administrators</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>High School Counselors</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Community College Teachers</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Community College Administrators</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Community College Counselors</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>11</td>
</tr>
</tbody>
</table>

Of the 29 references to technology use in the classroom, 18 of the comments were positive, and the educators indicated that technology could be a beneficial tool for students with academic difficulties.

![Graph showing positive and negative perceptions by teacher category]

Figure 3. Positive perceptions and negative perceptions.

When asked what changes in teaching have made an impact on student learning, participant HSC#2 commented, “I think many changes involve using technology to engage students and more accurately pinpoint areas in which they may need improvement. Teachers have unprecedented access to materials and data to help individualize instructional needs for students.” In response to this question, participant CCT#6, indicated, “I believe that by incorporating more technology with computer writing labs with online course opportunities, students have greater chances to
succeed.” In agreement to the positive impact of technology, community college participant CCT#5 determined, “The community college curriculum is designed to keep students writing, reading, and using basic skills knowledge, but the curriculum is also designed that students get immediate feedback on their writing through the use of technology.” Participant HSA#1 noted, “I think learning environments have gotten much better. Technology in the classroom has better prepared our teachers and students.”

Although the educator’s perceptions of technology use in the classrooms as a tool to help students who were at risk were mixed, the results showed more positive comments than negative. The data also indicated that more high school teachers perceived that technology had a negative impact on student’s chances for academic success. Of the 11 negative perceptions coded, 9 of those came from high school participants who determined that the introduction of the one to one initiative into high schools has been a detriment to student learning. Participant HST#4 revealed, “As a whole, students and teachers give too much time to technology. The class period is consumed with teachers and students on their computers and the teaching/learning process is stifled.” HST#10 noted, “Since the 1-to-1 initiative, I have seen a drastic drop in overall student aptitude; rather than responding to a question by thinking, they Google their responses.” High school participant HST #7 reflected, “Since we have given the students their computers, I have actually seen a drop-in student honesty; their work is simply copied and pasted, not thought, no effort.” In response to this statement, participant HST#4 agreed and stated, “You are absolutely right; students no longer read for understanding, they just read enough to find the answers on a web site, and they refuse to document where they get the info.”

Participant HST#10 acknowledged the potential benefits of technology to student learning, but she also voiced the following sentiment:
As much as I think the computers are a benefit, I think they have caused students not to think. The students use the computer to copy and paste and complete assignments so they can say they have it done - not that they have processed the skills of the assignment. Even when given a specific assignment with rubric and expectations of the assignment, many -if not all- students find something on the web to entertain themselves. Teachers are forced to monitor the computer and what is being watched – basketball, movies, games – during class instruction.

Participant HST#7, also concurred that technology has its place in academic learning, but she also noted that,

In my English classroom, I try to find a good balance between classic and innovative teaching styles. I know it is important for students to be exposed to different teaching style and new ideas, but I do not always agree that the classroom has to be saturated with technology in order for students to learn. Technology has its place and advantages, but I believe that it’s still important for students to learn how to take notes by hand and have legible handwriting!

Participant HST#4 agreed that technology has its negative impact, she remarked, “Students rely too heavily on technology devices - Students do not read enough. When given time to complete homework or reading in class, they would rather watch a movie.” To this comment high school participant HST#10 interjected,

I agree, as I said earlier, the cycle needs to be stopped. We need to challenge the students, yes! Engage the students, yes, and student driven learning can work, however, it should be the addition, not the alternative! Let students use the computers, yes, but they should not have access to the computers solely as the teaching tool! Somewhere there has to be a teaching, by a teacher, of the basic skills. Students need to know that a noun is not a verb,
and a fragment is not a sentence. Without the basic skills, they will be behind. Left with
the computers, alone, the students are not learning, they are being dumbed down, and not
being taught to be active thinkers and scholars.

The general consensus of the participants concerning technology was that when properly used, it
had the potential of being an excellent tool for student learning; however, students must first have
a solid foundation upon which to build. They must have the basic skills.

Basic Skills: Writing and Grammar. In reference to the word basic (skills), the
researcher noted that the word frequency query also showed that the word writing appeared 117
times and grammar appeared 49 times in reference to basic skills needed for student academic
success. In order to identify participant perceptions of the factors that cause academic
developmental deficiencies in students, the researcher created the aggregate node student
weaknesses and identified four child nodes that seemed relevant to educator responses in Phase II
interviews and the Phase III focus group sessions. These child nodes were identified as critical
thinking skills, reading skills, grammar skills, and writing skills. Table 10 shows a breakdown of
the results discovered in these nodes.

Table 10
Aggregate Node Student Weaknesses Chart

<table>
<thead>
<tr>
<th>Node Name</th>
<th>Number of Files</th>
<th>Number of References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Weaknesses</td>
<td>39</td>
<td>133</td>
</tr>
<tr>
<td>Critical Thinking Skills</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Reading Skills</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Grammar Skills</td>
<td>11</td>
<td>23</td>
</tr>
<tr>
<td>Writing Skills</td>
<td>13</td>
<td>33</td>
</tr>
</tbody>
</table>

Both high school and community college participants determined that students must have a
rudimentary grasp of the fundamentals of basic grammar, reading, and writing skills in order to be
academically successful. When asked what plan they would implement for improving academic deficiencies in students graduating high school and for improving their college readiness, the participant’s responses and perceptions included similar ideas. For example, participant CCT#7 responded:

I have been told that grammar, punctuation, and basic writing skills are not taught in high school, but I think it should be. The strategy used by us in the developmental courses should become curriculum practice in the high schools also because these basics are what the students are missing when they come to us. I also believe that writing is an essential skill that is missing from the high school curriculum. Writing should be consistent.

Participant CCT#5 noted:

Students need to be initially re-introduced to basic grammar, which includes parts of speech, subject and verb agreement, verb tenses, pronoun usage, adjective, and adverb usage. They also need to be re-introduced to basic sentence structure and paragraph writing. These skills are best taught through memorization of grammar rules and repetition of skills usage. In order to become better, students need continuous practice and feedback.

Participant HST#4 interjected:

My plan would include more writing and more reading skills drilled as a part of core curriculum. In addition, there would be more critical thinking skills emphasized rather than allowing students constant access to their computers and the opportunity to let Google do the thinking for them.

While participant CCT#6 agreed that students need to return to basics, he further noted that student’s academic deficiencies build from the lack of the fundamentals of learning. He insisted that:
Because the students are weak readers, they have a deficit in basic grammar and sentence structure. Also because of the lack of these basic skills, the students have limitations in their vocabulary skills and their reading comprehension. In addition, because of these things, they are poor writers. Therefore, my plan would be to meet them where their weaknesses begin and build them up to where they can overcome all of their fundamental weaknesses. This building process takes time, and it must be accomplished early in their academic careers. Waiting until Grade 10 through 11 may be too late.

Participant CCT #6 furthered:

By the time students are in 10th grade, a plan should already be in place to get them college ready. This plan should include assessment; course placement; tutorial opportunities; technology-based reinforcement of skills; opportunities for rigorous writing, editing, and revision; reinforcement of vocabulary usage and reading skills, and opportunities for reassessment.

Participant CCT#5 expressed:

I agree that learning the basic skills is effective. I also believe that the same basic skills techniques that we use in the Beginning English Developmental Courses are the same skills that should be drilled in grades K–12. I believe that somehow as institutions of education, these skills are not being taught consistently, and because of the inconsistency, students have gaps in their learning and understanding of these basic skills that show up when they are preparing to leave high school and enter college.

Participants perceived that student weaknesses in the rudimentary skills of reading, writing, and basic grammar are a key cause of academic deficiencies and a lack of college readiness in many graduating high school students, which calls for even more active teaching strategies and teacher planning. However, participants also perceived the need for students to become more
involved in their own learning experience by having an interest in their learning. The concept of student involvement and student efficacy along with an active academic environment promotes a learning environment conducive to academic success (Astin, 1993; Bandura, 1993; Tinto, 2007; Wernersbach, 2011). Several of the participants in this study perceived that a student’s self-efficacy (individual thoughts about his or her abilities) along with student accountability have an impact on his or her academic success. In response to the focus group questions that questioned the causes and remedies for student academic deficiencies, high school participant HST# 7 responded:

I believe the principle causes for student academic deficiencies are student failures (failing one or more grades) and lack of student motivation. I have always been a firm believer in self-motivation, self-efficacy, and self-advocacy. Students need to be able to speak up for themselves when it comes to their needs and questions about academics. Self-advocacy is a life skill that will help students in life; too many times students enter the world without ever having to do any major task by themselves! And, they enter the world lacking confidence in who they are and what they know.

Participant, CCT#3 voiced:

I agree, students need to take ownership of their academic successes and failures and becoming self-motivated is a key component of them achieving that ownership. They also need to be able to speak out on their behalf when it comes to their academic needs and build confidence in their academic abilities, and this can only be done by ensuring they have academic successes along the way. I also firmly believe that we as educators have the responsibility if holding students accountable for their behavior and performance in the classroom. This definitely would help with college readiness. And, as it stands in the
K–12 curriculum, teachers are held accountable, but students are oftentimes, not held accountable.

Participant HST#6 interjected:

I believe that students often blame everyone but themselves for their mistakes. In addition, students have become very dependent on teachers/parents to provide answers/solutions for them. Also, very relevant to the issue is the fact that students are not able to plan ahead, organize their study habits, or prioritize their work. As educators, it is our responsibility, to not only drill the basics, but it is also our jobs to somehow equip or motivate students to become independent, responsible, self-concerned learners. Now, the question is how do we do that when we are dealing with so many different mindsets? I guess this is the quandary of all dedicated teachers.

High school participant and counselor HSC#2 echoed the need for students to become involved in their academic success. She noted that:

I think some lack of college readiness has to do with emotional maturity. Though academically prepared according to Mississippi Department of Education requirements, many students lack the initiative, responsibility and self-discipline to succeed in college directly after high school. The freshman class of the 2018–2019 school year has new graduation options that will hopefully encourage students to take a more active role in their high school academic pursuits, which will theoretically help them to be more engaged in academic choices they make in college.

She continued:

I also think that students need to be more intentional with their postsecondary plans. Most students enter college with no ideas about what they want to do or what kind of training they need to achieve their goals and aimlessly take classes because going to college after high school is the “next step.” By helping students to more clearly define their career goals
and encouraging them to research postsecondary needs to achieve those goals, I think students could be better prepared to enter college and better equipped to pursue their careers. We, then, as their teachers and counselors give them support in knowing what they need to move ahead, and we give them an opportunity to confidently work towards their goals rather than waiting until they graduate to find out that they do not have what the need for academic success in college.

When asked what additional steps high school educators should take to ensure student academic success, participant CCT#3 determined that the students must take responsibility for their academic progress. She stated:

Well, you will have to forgive me for saying this, but I think that high school teachers and administrators are doing all the necessary steps. I got out before Common Core came in, but I just know that there is so much data and so many innovations and different things with let’s try this and let’s try that, but honestly, our students are not receptive. And, you can pull it out as long as you can, but there is nothing else to do. I think that they think that it is the teacher’s job, but, well, No, it IS the student’s job. We have to tell them, ‘No! this is your job right now! I am sure that there is always something that you can do (teachers), but it seems that right now, everybody is on go to help them (students), but they have to get out and grab it. At least that is what we see in college. We tell them, these are the resources, go to the writing center, come see me in my office, and we get crickets. Students have to become responsible and accountable for their own learning...at least, I believe this should happen at some point!

Participant CCA#1 responded:

I agree that students need to have a part in their learning, this is a definite; however, I know that as educators, we need to make sure that our curriculums are rigorous in order to foster
learning. We have to, I believe, that high schools must encourage more strenuous writing, reading, math, and science classes; high schools should insist on courses that challenge students and that instill confidence in learning. When students are given the resources and the tools that they need, they become confident in what they know, and then and only then can they become academically successful.

**Presentation of Results**

The following discussion and analysis serve to reveal how the research question was answered by the data collected. Each of the themes that emerged from the data analysis proved relevant to the research question: How do educational stakeholders perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi?

The five relevant themes that emerged from the data included: (a) *early identification* (b) *remediation*, (c) *basic skills (grammar/writing/reading)*, (d) *technology*, and (e) *assessment*. These themes are discussed based on the results of coding and relevance to the participant’s understanding and perceptions of the research question. This analysis is designed to give an account of the participant’s perceptions and to capture their experiences during the research process.

**Theme #1: Early identification.** Early identification was the first theme identified from the data. The theme early identification was discovered in the initial coding of the Phase I surveys, and this theme was revealed in both Phase II face-to-face interviews and the Phase III focus group sessions. In a face-to-face interview, participant CCT#7 commented concerning early identification that:

I truly believe that if students are identified before high school, they will be able to get the help that they need in those earlier grades. Early detection requires early assessment, and
one these kids are identified; then the regiment of teaching the basics begins in earnest. Teaching, repetition, assessment, practice, reassessment, and a continuation of this until skills are mastered. The process is ongoing.

Participant CCT#2 responded to the question concerning early identification by noting:

If this would happen (early identification), especially in elementary and middle school, by the time students get to high school, they would be already in a developmental track that would increase their chances of correcting their academic shortfalls---and be on the right road for college success.

When addressing the question concerning early identification and the need for the SREB course in either the eighth or ninth grade for students who have academic deficiencies that might hinder them from becoming college ready, in the Phase III focus group session, participant HST#8 commented:

I agree, we should begin identifying students as early as pre-school, and I think that we can focus more on re-assessing as the student grows. I think (not that this in the question at all) but we don’t just need to assess them when they are little, but we need to continue to assess them as they grow and as they mature because that social aspect does factor in. And you are going to have kids who kind of catch up and fill in those gaps as they get older, and some are going to kind of max out, and may even regress, depending on their situations.

Participant HST#4, hesitantly interjected:

Well, I don’t know, we may need to do what we did way back in the day, when we used to track these kids, and begin the tracking process early, possibly in sixth or seventh grade. And these kids who are not developmentally on grade level or who are two years older than the grade they are, those kids give additional help. I know that, now, at our high school, many of these kids are given the opportunity to makeup things on line, and most of them do
not take the opportunity. I think that there needs to be a class that is geared towards moving them up and finding out what that deficiency is... because so many students just don’t care, and they don’t have parents that don’t know how to get them the help that they need. As far as educators, we at the high school, we are limited because we are not trained in so many areas of teaching kids who can’t read, and they are 17, how to read. But, if there are more resource teachers, we only have two resource teachers; we need more resource teachers that can handle this type of problem. Also, two resource teachers who see kids 90 minutes a day is not going to help a whole lot.

In agreement with the thoughts concerning early identification and the idea of tracking students, participant HSA#1 noted:

Participant HSA #2 is probably going to frown on me because I know we have them (counselors) in place, but I have been studying a lot lately. We know that special education kids have what is called an individual IEP, and we know that it is an individual plan for them (the special education kids) to be successful. But, I think each student should have one, especially the students who have a history of academic weaknesses in the core subjects... now I know that we do have it, but I don’t know if we follow it (or how closely we follow it). I think that each administrator should be involved in it... and, I believe that each student should have an individual graduation plan that is revisited each year by his parents, teachers, and counselors. I know it sounds like extra work, but I believe it will help us help them get college ready or ready for whatever next step after high school they take. This individual plan can begin as early as sixth or seventh grade, perhaps earlier and follow them through high school and perhaps into college.

The participant’s revealed in the focus group discussions that early identification of students who are at risk affords counselors, administrators, and teachers an opportunity to implement a plan of
academic action. A key component of the academic plan would include strategies that will make interventions and remediation possible for these students.

**Theme #2: Remediation.** When asked how students with academic deficiencies should be accommodated, the participants indicated that remediation is an effective academic support tool. The high school participants noted how this accommodation was utilized in their high schools, but also determined that there should be an expansion of remediation accommodations for students with academic deficiencies. Participant HST#10 commented that,

My school offers remediation in ACT classes. We are currently offering a college ready course for students who have below the required ACT score to get into a community college at college level. This course is designed to teach them college essentials prior to graduation.

Participant, HST#2, followed with:

Our school offers two semester-long elective classes to help students increase their scores on the ACT. Teachers are also encouraged to use timed ACT preparatory activities for bell ringers at the beginning of class, especially in math. We need to have some type of remediation classes for students who have academic deficiencies in core subjects as well.

Participant HST#7 responded:

I know that this year there is an English class specifically modeled for students who scored low on the ACT in English/Reading. I do not know the criteria for students to enter this class. I do know that these students follow a curriculum aimed to help build their skills in these areas. We also have ACT prep courses available. I think that the course should also target students who perhaps made an acceptable ACT score, but who are still weak academically.

Participant HST#1 interjected,
My school provides our students with the opportunity to take “college ready” courses to help them by pass the remedial courses they would have to take their freshman year of college. These courses are somewhat remedial in their design and curriculum concentration on basic skills, but not every student who has academic deficiencies can take these courses.

Participant, HST#2, commented concerning the remediation course initiated by the Mississippi Department of Education beginning in the 2018–2019 school year. HST#2 stated:

As one who has been teaching the Essentials class, I think this course is beneficial. I have already seen a difference in the quality of the student’s writing. We spend a lot of time looking for claims and text support in informational texts, and currently we are in the process of writing a literary argument paper based on the ideas from Philip K. Dick’s Ubik. We spend time daily discussing how these texts are relevant today and looking at why we consumers of technology. The discussion has been so good. They are thinking outside the box. We have also reviewed basics in grammar. Overall, I have seen a rise in their ACT scores in Reading. I believe this course will prove to be very beneficial to struggling students. It somehow needs to be introduced to the curriculum to benefit more students, not just those with low ACT score in Reading and Writing.

In addressing the perception of how academic deficiencies should be addressed, participant CCC#2 stated, “remediation could be handled by the creation of learning communities on a cohort model and the expansion of tutoring and student learning services in both community colleges and high schools.” Participant CCT#7 interjected,

Our college identifies students in need of developmental courses upon enrollment through mandatory placement assessment. The students who are placed in these courses stay in these courses until they meet the required grade in the courses before being placed in a
regular curriculum college level course. In order to help these students move out of the developmental track, the college is reducing classroom sizes and is offering student’s additional tutorial services and access to learning labs. I do not know how that sort of remediation can be carried out in high schools, but it would be wonderful if it could be done prior to the students coming to us.

Community college teachers, counselors, and administrators agreed that the programs provided for their developmental students could be modified to meet the needs of students prior to graduation. Administrator CCA #1 surmised that,

Some of the best practices to offset college students’ lack of preparedness are teaching developmental courses; having labs for reading, math, and English; and offering mentors and counselors for these underprepared students. Perhaps, adopting these practices, and administering English, math, and reading proficiency exams in middle school would allow enough time for the remediation of underprepared students prior to their graduation.

**Implementation and intervention.** Identified as crucial to a student’s academic success, participants in the study agreed that a plan of implementation and intervention must be established to ensure that students who have academic developmental deficiencies show signs of academic growth. The participants perceived the need for the implementation of strategic plans and goals that would afford students more opportunities to improve their academic skills and offer them interventions that could offset academic failure in college.

In Phase III focus group sessions, community college participants discussed implementation and intervention. Participant CCT#2 noted:

At the community college, placement of students in developmental track courses is based on their ACT scores and college entrance tests. Once the students are placed, we provide the students with access of facilitated learning and reading and writing labs. We provide
lecture, one to one student teacher interaction, hands on teaching and learning strategies, and we offer other useful intervention and remediation strategies. Our curriculum provides for consistent writing with feedback, and we provide tutoring and academic interventions using technological tools. We offer supplemental instruction, reading and writing labs, accelerated courses, learning communities for developmental students, and academic counseling. I believe that in order to reduce the number of students who come to the community college needing remedial courses, these interventions and accommodations need to be implemented in grades 8–12.

Participant CCT#9 agreed and added:

I agree with this community college line up of interventions. I also would like to stress that the best strategies to improve a student’s writing and grammar deficiencies is to include a process approach to writing in the curriculum. This approach allows students to practice with different writing styles, review grammar with extensive drill of grammar-intensive units and to polish his or reading and thinking skills with critical reading exercises. The addition of the one-to-one instructor conferences with students concerning their writing and their needs is an added plus and an excellent recipe for student success.

Participant CCT#6 commented that:

By taking the students from the basics of grammar and writing, which include parts of speech and sentence structure, on to extensive paragraph writing and later on to writing the full-blown essay, we initiate a pivotal part of the intervention and implementation strategy. We also make sure the students sharpen their reading skills because better readers become better writers. The key to their mastery is repetition and immediate feedback, editing, and rewriting.
High school participants acknowledged the need to adopt selected community college curriculum strategies in order to help enrich the opportunities for students with academic deficiencies to be better prepared for college level course work. Participant HST#3 remarked:

Well, I think we do a great job with the dual enrollment, but there could be something like the remedial classes. I know that in the community college, students do not get credit for these courses, but maybe, we can…well maybe implement the same structure (I guess we are doing that to some degree with the new courses that we are offering this year—but we need to get them (the students) the remedial help that they need before they go into college. Perhaps by pairing with the community college, maybe English standards in high school could be matched with the standards required in community college. Kind of like Pre-Comp 101 to get them that mindset to the expectation that this is what is going to be what they are expecting when I do go off to college and implement these courses into the curriculum before they get to be seniors in high school.

When questioned on the need for implementation of some type of partnership that might help to bridge the gap between high schools and community colleges as they relate to students who leave high school underprepared, the participants shared the following opinions. Participant CCC#1 noted

I agree, I do know that we do have curriculums in place that pretty much match the state’s requirements for transition from secondary to postsecondary schools, but there does seem to be a need for a more tangible relationship between possibly the high school counselors and the community college counselors in coordinating easier transitions for the students entering college. Perhaps some type of correspondence can be made after the first semester of school that can alert the community colleges of potential students for enrollment, and additional steps can be taken to ensure that those students are specifically targeted by high
school counselors with the help of the community college recruiters to make sure the students have the tools to amplify their success.

Participant HSC#2 observed

Right, we do have a good working relationship with the community college, especially when it comes to the dual enrollment classes and on-line classes; however, other than college day for seniors - that targets all of the students and all of the colleges, both 4-year and 2-year in the area, and the dual enrollment and on-line courses, that I just mentioned, very little is done that might impact students who might enter college in the developmental courses. We do have, several days during the year, when recruitment officers come from the community college, but these visits target the general enrollment population, but does not address the issue of what specific classes a student may end up taking. I think that a collaboration of this type might be beneficial; the question will be timing and concentration of focus.

Participant CCC#1 agreed. The facilitator stated:

Very good, now to get back to Participant HST#8, I am so sorry that I had to interrupt your response to question #5; so, let’s go back to it, if you don’t mind. What steps, at the high school level do you think are necessary to prepare the students who have academic weaknesses or deficiencies?

HST#8 opined:

Umph! I have been sitting here thinking about this question the whole time, and I really don’t have anything different to add; however, I do think that there are additional steps to take. I think that the most important thing, and I think this goes along with what participant HST#7 was saying about the next question. We need to meet the students where they are, but at the same time, not lower our expectations of them because a lot of times with that
population of students, we start to lower or expectations and our standards because we think that they are not capable of meeting them. However, they are only going to rise to what we expect of them. So…

Participant HST#6 noted, “And the colleges are not going to lower their expectations,” to which Participant CCC#1 responded, “No, we are not! We shouldn’t!” Participant HST#8 continued:

I agree! I think dual enrollment is one of the big things going on right now between high schools and the community college that is already happening, is expanding, and can be expanded even more. It is a really good partnership between the community college and the high school. These courses give the students a good sense of what college is going to be like as long as it is taught right. I think that the partnership can be expanded by even somehow identifying students who are in need of additional help and offering a re-medial comp class before they get to the community college because we know that once they get the college, they will have to take those remedial courses. Why can’t we offer that course here at the high school before they get into the high school comp class? Just identify those students earlier on. Participant HSA#1 was talking about how students who have a lower ACT score can be placed in a comp class, and are capable of making a C. When I first started teaching this Comp I course, I did not believe that. When I first started teaching the dual enrollment classes, I wanted a prerequisite, which would have excluded students with such a low ACT because I had students in my regular classes who could not put a subject and verb together. It has been a real eye opener for me because eventually, we allowed those students in, and I started to look at it differently. Rather than saying, “This is an exclusive club,” I now say, “We are going to welcome you in and get you to where you need to be.” Like I said before, I don’t teach the class any differently, I don’t use a different rubric for these students, and almost all of my students have a C or above in my
classes. And, it is not because I am grading them easier; it is because I …not that I am working harder . . . it is that.

**Theme 3: Basic skills (reading, writing, and grammar).** The study revealed a general consensus from both high school and community college participants that the students who are at risk of leaving high school unprepared for college are those students who have a poor background in the basic skills of reading, writing, and grammar. In attempting to determine how the deficits of these basic skills could be addressed, community college participant CCA#1 noted that:

It seems reasonable that stressing reading, writing, and basic from the earliest grade to the last grade in high school and recognizing very early the weaknesses of students in these areas would alleviate or surely reduce the need for remedial courses at the college level. There needs to be a strict and consistent follow through in helping these students in the areas that they struggle the most.

Participant HST#1 commented in the focus group session:

I am a big proponent of writing across disciplines. In my high school, all seniors were required to take a 2-week Grammar refresher course and pass a test over those skills in order to graduate. It might not be a bad thing to consider making this mandatory at other grade levels. Scheduling would be a problem, but I think that might be good. One of the things I like about the Essential of College Readiness curriculum that my school has adopted is that it shows the students how to break down reading assignments and then it continues to practice those skills throughout the unit.

CCA#1 returned by stating:

I have to reiterate that I think that the strategies of students’ writing, writing, and more writing and kind and efficient feedback from caring instructors are the most effective tools
to erase deficiencies for students in developmental English; I also believe that this same strategy will work for students who have difficulties in this area in grades 9-12.

Participant CCT#9 offered the following:

Yes, it is true students are lacking critical reading skills, fundamental writing concepts, and a full grasp of punctuation, grammar, and other writing mechanics. I believe that the best strategies to help them is to include into the class curriculum a process approach to writing, practice with different writing styles, extensive drill of grammar-intensive units, and critical reading exercises. I also thing that classes should be designed so that there can be one-to-one instructor conferences with students concerning their writing and their needs. Students need feedback and constructive input.

Participant HST#7 noted that:

I know that this year there is an English class specifically modeled for students who scored low on the ACT in English/Reading. These students follow a curriculum aimed to help build their skills in these areas; it would be great if somehow our school curriculum could offer this type of course for students who struggle in reading, writing, and grammar. The only additional help that we give is through the SPED classes, but these kids are usually not just SPED kids. As individual teachers, our school day and our class load does not allow much room for individual one-to-one help.

In looking at ways to incorporate time for teaching the basics, most participants agreed that incorporating more writing into the curriculum would require students to adhere to the fundamentals of grammar and writing. They also agreed that this step is essential to individual academic growth. Participants also identified key deterrents to student usage of the basic skills in most classrooms today.
Theme 4: Technology. When looking at the fourth theme that emerged from data analysis, technology, the researcher saw a connection between the participant’s perception of the major causes of academic deficiencies in some students and in the ways to address those academic deficiencies. The data revealed that 40.9% of the participant responses revealed that these high school and college participants perceived the use of technology in the classroom as a detriment to student learning; whereas 9.1% perceived that technology enhanced students’ chances at academic success and increased opportunities for college readiness. In response to the question of what changes in education have occurred to make a difference in student learning, participant CCT#5 replied:

One policy change that I believe has made a difference in how students are taught is the 1 to 1 initiative that opened the door to students having access to technology in the classrooms from grades K–12. This change, I believe, has contributed to student’s lack of basic skills knowledge. With this change, students and teacher have become dependent upon technology and have become less dependent on knowing how to write and how to apply grammatical principles. Although technology is good, it can be crippling. And if I could make a change, I would limit student time using technology and increase student writing time…using basic grammatical and punctuation skills.

Participant HST#4 agreed by noting:

I have to admit, I thought technology in the classroom was innovative and a definite positive breakthrough for education, and I guess it can be…but teachers and students are using it incorrectly. Both teachers and students have become too dependent on it. I have seen an over reliance on technology to teach students. Teachers sometimes use it and an excuse not to teach, and students use it as an escape from learning. It has its place when there is a need for student-based learning. However, I believe that a good part of the
instruction period should be teacher-led instruction, with the follow through of student hands on application of things learned.

As a proponent for and against the use of technology, HST# 7 commented:

The classroom should be a balanced arena of innovative styles that match the student’s styles of learning. Innovative teachers learn to expose students to different things to peak their interests and to capture their learning potentials. I don’t believe the initial intention of the 1 to 1 initiative not was to saturate the classroom with technology and make it the only medium of student learning. I said this earlier, and I firmly believe it to be true, technology has its place and advantages, but I still believe that it is important for the students to put the computers away, take out the pencils and paper, and to write and think about the whys and why-for’s of whatever it is that they are exposed to.

HST#10 added to the discussion, a positive view of the use of technology by stating:

Our students come to us with gaps in their learning, with skills that they are missing. Classroom teachers do not have the skills nor the time to individually see where each child is lacking. Normal class rolls carry anywhere from 25-30 students per class. The teacher knows that a child is missing skills, but that teacher does not know how nor have the time in a 90-minute classroom with 25 to 30 other students in class to help that student develop that skill (Let’s just be honest). And high school teachers do not have assistants, and we have limited time before school and after school to tutor. This is where computers could be used. As I said earlier, I do not know how this would be implemented into the school day, but if the student could work on specifically the skill they have missed then they could improve. Computer programs can be used to show the teachers and the students where the students are weak, and then teachers can plan to help them to overcome their deficiencies.
Computers could be used to help close those gaps, but again the student has to be willing to go through the program.

Participant CCT#5 offered the following:

I believe that our community college curriculum for developmental education offers a good blend of traditional teaching and the use of technology, and I believe that the combination (for the most part) works for our students. The community college offers learning labs and tutorials for students who are having academic struggles in the developmental courses. The traditional basic skills classroom setting provides students with one-to-one teacher student instruction by limiting the class sizes to no more than 20 students per classroom, so that students get immediate feedback on their writings from their teachers and through the use of technology. If somehow this model could be adopted secondary schools, perhaps, there would be less need for so many developmental courses at the community college.

Although participants had differing views on the integration of technology into the classroom, most agreed that technology has a vital place in education. Participants determined that educators must be properly trained in the use of technology, especially as a tool to advance active learning in their classrooms. They also suggested that technology an be used as a tool used by classroom teachers to determine individual student weaknesses.

**Theme #5: Assessment.** The fifth theme that appeared relevant to the perceptions of high school and community college participants in this study was assessments. The word *assessments* appeared 36 times in the word frequency chart. The researcher created a parent node entitled *assessments* that had 30 references. Two child nodes were also created that were identified as positive perceptions and negative perceptions. A child node, positive perceptions, showed 16 references, and child node negative perceptions showed 8 references. When asked to identify strategies used by their institutions to assist in identifying and implementing plans to assist
students who had academic deficiencies the need for assessments at critical academic thresholds was mentioned. The Phase I individual interviews revealed both positive and negative feedback.

For example, participant HST#7 acknowledged that her district like others in the state uses state assessments to identify students who have academic difficulties. HST#7 stated:

Here in our district there are multiple State tests in Algebra, Biology, English II, and US History that help determine academic preparation. There is also a test bank called CASE that is similar to the State tests; this helps teachers determine ability and progress.

Additionally:

I use classroom assessments as well as CASE testing to determine student achievement and to target students in need of remediation. Many times, my students that need remediation are not showing progress in class and test poorly.

Participant HST#8, acknowledged the positive use of assessments throughout an academic course period. HST#8 noted that:

I use formative and summative assessments to see where students are at the beginning of a lesson and where they end up with that lesson or unit. These assessments are used to determine whether or not students need additional instruction. I believe that this is a great gauge for both teachers and students.

HST#8 also warned that assessments have to be relevant to what students are required to learn.

HST#8 acknowledged:

Teachers need to make sure that what they are assessing on and how they are assessing students matches up with the curriculum standards. Too much weight on completion grades might allow student to pass even though they have not met the standard. We have to make sure that our curriculum standards and assessment standards removing our students towards college readiness.
Participant HST#10 determined that too much assessment could do the students harm rather than move them to college readiness. HST#10 responded with:

I have seen more teaching to ensure that students pass state tests and less teaching of the skills that will prepare the students for life beyond the state test. Students are not being taught to be able to transfer skills and knowledge from one learning environment to the next.

HST#10 also referenced the fact that “so much time is spent in the “testing” years to prepare the students for the test that students are not taught the basics.” To place emphasis on this point concerning assessments, in response to the question of assessment during the Phase III focus group session, community college participant CCC#1 commented:

I agree, and you know we have been talking about assessments, and of course, we are in a state where we are assessment driven, but I think we have missed the point of assessments. Assessments are not meant to just give tests and have statistics to put on paper. We have to take what is on paper and put it towards steps that will help us to develop strategies and teaching methods that will boost the academic success the children.

The discussion continued with rich, constructive remarks from participants. HST #7 commented, “Right, we have to see how the data applies to that particular child!” HST#6 added, “I agree, but when people talk about being over tested, I get that, but at the same time, we need those measures to.” HST #7 agreed saying, “Yes, but it is what we do with the material.” HSC#2 observed, “And, I think that our teachers do a better job of using that data appropriately than other school districts. We use the data to students and to improve their outcomes.” The participants continued with mutual agreement, as high school participant HST#7 continued:

Right, we look at the skills, and we sort the students, but it is not like we are shuffling papers, and we let them know that yes “Your number is important, but you are not just your
number” You are a student, and you have intelligence, and this is where you need to improve. This is where you need to show growth, and I want to see you improve. That is the baseline. We then challenge them, can you do it, you can do better? Assessments must serve the purpose of serving the students.

The data collected from the study revealed that the high school and community college educators who participated in this study each perceived the need for implementation of college preparedness and developmental education early in the academic career for students at risk of having to take remedial courses once they enter college. The data also revealed that the five areas of academic concern that need to be improved and implemented prior to high school graduation: early identification (intervention/implementation), remediation, technology, and assessment.

Chapter 4 Summary

The purpose of this study was to explore how educational stakeholders perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi. The chapter gives a detailed summary of the researcher’s finding as they relate to the research question. The data for this study was collected from the perspective of 20 educators of varied years of educational experience, academic vocations, ages, and ethnicities. The data collection was in three phases, which included the Phase I Qualtrics survey, the Phase II face-to-face interviews, and the Phase III focus group sessions. Data analysis was done using Saldaña’s (2016) open coding methods and NVivo 12 for Mac software. Using the NVivo12 software, the researcher used word query and the creation of coded nodes as a part of the analysis, collection, and organization process.

The analysis of the data revealed five themes: (a) remediation, (b) early identification (intervention, implementation), (c) basic skills (writing, grammar), (d) technology, and (e) assessment. Each of the themes directly related to the research question: How do educational
stakeholders perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi? The participant responses also indicated a direct association with the conceptual framework identified for the study, Bandura’s (1993) theory of self-efficacy, Astin (1999) involvement theory, and Tinto’s (2007) integration/retention theory.

The results of the analyzed data showed that both the high school and community college participants perceived the need for early identification of students who were at risk of academic deficiencies. However, there were indications of differing views of when students should be identified and when academic interventions should begin. The study’s results also revealed that participants agreed that students who graduated high school unprepared were deficient in the areas of reading, writing, and basic grammar. Because of these academic deficiencies, the participants agreed that remediation should begin as soon as these deficiencies were identified in students. The results showed that the majority of participants perceived a need for remediation courses in Grades 9–12; however, there was also a general consensus that students should be met where they are in their areas of academic deficiencies. The study results further indicated that although technology is an acceptable tool for remediation, participants perceived that both teachers and students should use technology appropriately, or it will impede rather than enhance student academic success. The study revealed that the participants perceived assessments to also be a relevant tool in determining students who need academic remediation; however, participant’s views on to what extent and who should administer assessments varied. Finally, in connection with the conceptual framework of this study, participants agreed that students should be directly involved in their academic success. The study’s findings also upheld the premise that a learning community that nurtures student accountability, student self-efficacy, student involvement, and student integration into the learning environment promotes student academic success.
Chapter 5: Summary, Conclusion, and Recommendations

Introduction

Within the last decade, the number of freshmen entering college directly from high school- underprepared- has increased dramatically across the nation (Thompson, 2014). For example, in the academic school term of 2003–2004, 48% of the high school students entering 2-year community colleges entered having to take two or more remedial courses (Chen, 2016). However, in the academic school term 2008–2009, it was estimated that the number increased to about 60% of the nation’s high school graduates enrolling into at least one or more remedial college course (Jeffcoat et al., 2014). In the state of Mississippi alone, during the academic term 2014–2015, 59% of the state’s students who enrolled into Mississippi’s 2-year colleges were enrolled in one or more remedial courses (Butrymowicz, 2017).

Many of the students who entered these developmental course tracts were either delayed in completing their college program or they never successfully completed the academic coursework necessary to obtain their degree (Herman et al., 2017). This increase in the number of students having to take developmental track courses in college indicates that there is a significant gap that exists between high school requirements and college expectations. According to Levin and Calcagno (2008), this gap is referred to as the “remediation crisis”. Johnson and Sengupta (2008) called this gap, the “educational skills gap”. The majority of the students who leave high school underprepared are deficient in the basic or educational skills areas of reading, writing, and basic grammar (Bautsch, 2013). Although there has been much debate on ways to improve developmental education in the community college setting, the literature shows that there has been very little research done to identify the perceptions of high school and community college educators on the need for developmental education prior to college or their perceptions on how to close the gap prior to high school graduation. The purpose of this qualitative study was to explore
the perceptions of educational stakeholders at selected community college branches and high schools in urban Mississippi on how to close the gap that exists. The study provided an opportunity for these educators to express their views on the question of student academic deficiencies at the secondary and postsecondary level in core courses. The study also allowed stakeholders to explore their understanding of the gap that exists between high school requirements and college readiness indicators. The study provided information on how these educators perceive the need for change within their institutions and in the manner in which these problems are currently being addressed. Finally, the study provided information on ways to implement collaborative college preparedness and education courses to meet student needs prior to high school graduation. The study’s results answer the research question that guided the study, which was “How do educational stakeholders perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi?”

This study successfully answers the research question proposed, and the results add to the limited body of knowledge that exists concerning educator’s perceptions on the need for implementation of college preparedness and developmental education courses prior to college entry. The study’s results help to raise awareness of the need for the implementation of strategies and plans prior to increase the number of students who leave high school prepared for college level coursework in core courses. The results also leave room for further exploration through close analysis of the data and the open and direct dialogue of the study’s participants on how these strategies can be implemented. The study is vital to existing literature because it offers future researchers with data that informs the educational community on the understanding and perceptions of Mississippi educators on the issues of developmental education and how it should be addressed prior to a student’s high school graduation.
Summary of the Study

According to the literature, a key concern in education today is the overwhelming number of students who leave high school unprepared for college in the core courses of English and Math. In 2013, 42% of the nation’s students entering community colleges were not sufficiently prepared for college level English and Math courses, and studies reported that most of those students took one or more developmental course (Thompson, 2014). Of these students, fewer than 25% continued to complete their college program with either a degree or a certificate of completion (Thompson, 2014). In the 2014–2015 school terms, the state of Mississippi surpassed the previous national average of 42%. Statistics revealed that 59% of Mississippi’s students entered college unprepared in the core subjects of reading, math, and English (Butrymowicz, 2017). In addition, the literature revealed that according to ACT (2017), Mississippi fell far below the nation’s average of students who met or surpassed the ACT’s college readiness benchmarks in the core courses of Math, Reading, and Science for the academic term 2017; the national average was 27%, while Mississippi’s average was only 12% (para. 5). As a result of these percentages, Mississippi saw not only a rise in the number of students enrolling in developmental courses in the states community colleges, but Mississippi also saw an increase in the need for mandatory student placement and scheduling for developmental courses in community colleges and junior colleges in fall, winter, spring, and summer of the academic year (ACT, 2017).

Limiting this study’s focus to developmental education in two branches of a Mississippi 2-year community college and 3 high schools in close proximity of these campuses, the researcher sought to explore remedial and developmental courses as they related to Mississippi’s postsecondary and secondary education programs. The researcher also sought to explore, through the lens of educators, the areas of student and program deficiencies in secondary education that build the gap between college readiness and the lack of preparedness for high school graduates.
The study put emphasis on understanding the perceptions of major stakeholders at the postsecondary and the secondary level on the need for implementing college preparedness and developmental courses at the high school level and sought to answer the research question, “How do educational stakeholders perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi?”

The data, the findings, and the results of the study provided the researcher with rich and valuable insight into the high school and community college educator’s perspectives and perceptions of the need for early identification of students who are at risk of academic deficiencies. The researcher was also provided data into the understanding of the participants concerning the need of implementation of strategic remediation plans as well as data concerning their understanding of the role of technology in informing and providing means for assisting students with developmental deficiencies in the basic skills areas of reading, writing, and grammar. The data also provided the researcher with significant data on the need for collaborative and cooperative planning between high schools and community colleges to ensure that at risk students leave high school with the skills in place promote college readiness. The study’s findings also bore direct association with the conceptual framework identified for the study, Bandura’s (1993) theory of self-efficacy, Astin (1999) involvement theory, and Tinto’s (2007) integration/retention theory, which determined that student academic success greatly hinges upon the collaborative effort of a student’s learning community, which includes both teachers and students, a student’s active involvement in his or her leaning experience, and a student’s sense of self awareness, self-motivation, and self-efficacy.

This qualitative case study was conducted using 20 participants that were selected from two community college branches and three high schools in an urban area of Mississippi. The
participants in the study included 9 participants from the two community college branches and 11 participants from the three high schools. The participants included administrators, teachers, and counselors who each had direct involvement with students identified as having academic deficiencies that could affect their college readiness. Data were collected in three phases: the Phase I Survey, the Phase II Face-to-Face Interview, and the Phase III Focus Group Sessions. The sample included 20 participants in the Phase I Survey and Phase II Face-to-Face Interviews, and 12 participants in the Phase III Focus Group Sessions.

The data collected from the three phases of data collection was analyzed by the researcher using Saldaña’s (2016) open coding method and using coding reports generated through NVivo 12 for Mac qualitative software. Once data was collected, transcribed, coded and analyzed, the researcher was able to organize the data by creating parent nodes and child nodes to identify common patterns and themes. In the initial coding of the Phase I Survey data using Saldaña’s (2016) open coding method, analysis of the data revealed that of 100 responses 71 of the responses indicated confidence in their institution’s overall ability to meet the needs of students with academic deficiencies. However, 29 of the 100 responses were only slightly confident in the institutions, counselors, and teacher’s ability to meet the needs of these students. A second round of coding for data produced from coding and analysis of the last ten questions of the Phase I Survey identified two themes that proved worthy of further analysis of data collected in the Phase II Face-to-Face Interviews and in the Phase III Focus Group Sessions. These themes were remediation and early identification/intervention. Further coding and analysis of data obtained from the Phase II Face-to-Face Interviews and the Phase III Focus Group Sessions revealed the relevance of the two initial themes discovered and also revealed three other relevant themes. The five themes identified discovered directly aligned with the research question. They were
remediation, early identification/implementation, basic skills (writing/grammar), technology, and assessment.

This chapter briefly identifies each theme and its relevance to the limited body of literature that exists concerning the need for developmental education courses prior to high school graduation. The researcher also discusses the relevance of the study’s findings to current practices in high schools and 2-year community colleges concerning students who are underprepared for college course work. In addition, in this chapter, the researcher offers recommendations for alternative approaches to getting students, who are at risk of having to take remedial and developmental courses in college, prepared for college core courses prior to their graduation from high school.

**Summary of Findings and Conclusions**

One of the most controversial issues in education today is that concerning “remediation” and “developmental education” and the growing number of students who enter community colleges underprepared for the rigor of college coursework in what are considered core courses (Levin & Calcagno, 2008). Existing literature revealed much documentation and research that concerns the costs of developmental education to these institutions of higher learning (Complete College America, 2012). Existing literature also focused on the efforts to improve developmental programs by offering alternative approaches to traditional developmental programs on community college campuses (Neuburger et al., 2013). However, the literature also revealed little significant research available on how to reduce the number of students having to enter these developmental courses before they graduate from high school and even less literature that focused on the perceptions of educators on the need for implementation of developmental and remediation programs prior to high school graduation.
In order to provide insight and understanding into the issue of remediation and developmental education from the prospective of educators, the researcher determined to analyze the thoughts and ideas of these educators concerning the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi. Throughout the study, the researcher kept in mind the conceptual framework of the study that contends that a student’s academic success is dependent upon academic and social integration as well as the all-in involvement of students, teachers, counselors, and administration (Astin, 1993; Corbin, 1998; Finnan, 1991; Lewis, 2015; Marchione, 2012; Pascarella & Terenzini, 1980; & Tinto, 1993). With the focus on the research question and the conceptual framework of the study, the researcher used data gathered from the five themes revealed from the educator’s perspective to form the study’s conclusions and recommendations.

**Perceptions of confidence in academic support/ frequency of academic interventions.**

Saldaña’s (2016) coding process revealed that when questioned how confident high school and community college teachers, counselors, and administrators were in their institutions, their co-workers, and their own ability to meet the needs of students who were in need of remediation or developmental help in core academic areas, of the 100 responses, only 71 responses identified that the participants were confident in the overall support of the institution’s ability to meet student needs. Of the 20 participants, 18 were confident in the institution's overall ability to offer academic support. Twelve of the 20 participants, felt confident in the ability of counselors and administration to establish a developmental plan for student’s facing academic challenges, and 20 of the 20 felt that their co-workers were seeking to help students who were having difficulty in understanding curriculum content to overcome their academic weaknesses.

The coding revealed that the participants were less confident in their own ability to help students overcome academic deficiencies, especially in the areas of reading deficiencies and other
specific leaning difficulties. Only 9 of the 20 participants felt confident in these areas. This round of coding also revealed that when questioned about the frequency of academic interventions, planning, and support from staff and faculty for students with academic deficiencies, of the 118 responses, only 73 responses revealed a positive Weekly/Monthly frequency. With 12 negative responses out of 20, the coding revealed that participants perceived the need for more administrative interventions, involvement, and classroom visits in order to augment additional support for students with academic deficiencies. The coding also revealed that teacher and counselor collaboration was lacking in some institutions in the area of developmental planning and strategic input. The responses showed 10 positive responses and 10 negative responses concerning teacher and counselor collaboration. These numbers revealed that there is a need for a more cohesive and collaborative effort between teachers, counselors, and administration in identifying students in need of academic deficiencies and curriculum planning for those students with academic deficiencies.

**Perception of needed academic changes to ensure college readiness.** In the Phase I Survey, the question was asked, “What academic changes are needed to improve college readiness of students with academic deficiencies?” Nine of the responses given by the participants indicated that early identification and early intervention were necessary, and six of the 20 responded that remediation was needed primarily in the areas of reading, writing, and grammar. Only 2 participants indicated no changes were necessary, and only 1 participant indicated the need for more computer-based learning, differentiated academic instruction, and more college prep courses. Further questioning of when early remediation and early intervention should take place in the Phase I survey revealed that 11 of the 20 participants determined that identification and remediation should be ongoing from Grades 7–12. Only two of the 20 felt that remediation should begin Grades 11–12. The Phase I Survey only offered four categories for participant
responses to when identification and remediation should take place; however, the Phase II Face-to-Face Interviews revealed that participants perceive that there is a need for identification of students who are at risk as early as pre-school or elementary school.

The responses from the Phase I Survey confirmed the emergent themes of early identification/intervention and remediation. Coding of the Phase II Face-to-Face Interviews and the Phase III Surveys revealed evidence of the perceptions of the participants on the five themes that emerged from the study: early identification/implementation, remediation, basic skills (writing/grammar), technology, and assessment. The following section notes the participant’s views on these five themes.

**Theme 1: Early identification.** According to Jeon et al. (2011), “Children who enter school not ready to learn struggle with academic difficulties and manifest social and behavior problems in later school years” (p. 436). In this study, the data indicated that the participants agreed that students who have academic difficulties are more likely to become discipline problems as they continue in school. They also agreed that in order for students to complete high school successfully and fully prepared for college level courses, those students, who were at risk of academic and developmental deficiencies, had to be identified early in their academic careers. In the Phase II Face-to-Face Interviews, participants varied in their ideas of when early identification should begin. Of the 127 references to early identification, 31 of those indicated that students should be identified as early as pre-school and on into the elementary school years. Several participants voiced that the earlier a child is identified, the greater the chances for the areas of weaknesses to be addressed. Most of the participants agreed that many of the students come to the school setting with deficiencies that derive from factors beyond their control.

These factors include poor socioeconomic conditions, little to no parent involvement with early education, and the lack of educational tools in the home. One participant noted that in some
households, students are hindered because of the English language barrier that occurs when English is not the language spoken at home. Reardon (2011) determines that parental involvement, family economic status, and English language disparities in the home have a direct impact on student academic success. Therefore, the lack of early identification and intervention for students who show a deficit in these areas can have detrimental effects on their academic achievement outcomes as they progress through school towards college (Reardon, 2011). When identifying the strategies and tools to provide the implementation of interventions for these learning deficits, the educators in this study provided several plans of actions, which included rigorous use of basic skills learning strategies and the implementation of technology as a reinforcement for skills learned. The participants overwhelmingly agreed that the key to student success is active and consistent remediation of skills that are in deficit. One of the participants agreed that once a student is identified and intervention methods are put in place, administration, counselors, and teachers are responsible for implementing plans of remediation for that student that can be followed or tracked throughout that student’s academic career to ensure that student’s success.

Of the 127 coded responses for early identification and intervention, 73 of the participants agreed that early identification was necessary, but they were inconclusive of when that early identification and intervention should take place. One of the participants determined that educators must meet students where they are, and this requires an ongoing review of student academic successes and failures. Most of these 73 participants voiced that student deficiencies may appear at different stages of a student’s academic career. Although students may be on target grades pre-school to elementary, difficulties may appear in middle school. Once students are identified as being at risk, one participant suggested that a follow-up plan should be implemented for that student. This participant suggested that students with academic deficiencies and who are
at risk of needing developmental education classes once they enter college should have an academic plan similar to that of students who have IEP’s for special education. He determined that these plans could be put in place as early as a student’s sixth grade year. Another participant noted that it is important that student achievement gaps are identified early; however, interventions must begin as soon as the gaps are seen. She noted that in education there has been a push to identify students, but less of a push to address ways to help these students overcome their deficiencies. She determined that the push in education has been to get students ready for subject area or district tests, which leaves little room for helping students who are behind academically to catch up. She also noted that a major problem with addressing interventions and implementation of those interventions is the issue of classroom teachers not being trained to teach the basic skills that are lacking, reading being the most essential.

ACT (2017) reported that the national average on the reading portion of the ACT for 2017 was 21.3, and Mississippi fell 2.5% below that average with 18.8. Although this drop seems insignificant, it makes a difference in the number of students who leave Mississippi high schools underprepared for English Comp I when they enter college. The data in this study revealed that the participants determined early identification should be followed by intervention strategies that should include implementation of ongoing reading intervention skills that would include tutorial sessions, reading workshops, and technology-based reading assessments. The use of technology as an intervention tool, however, had positive and negative responses from participants, which were noted as a theme in the study. The participants also identified the need for interventions in the basic skills areas of grammar and writing.

Theme 2: Remediation, interventions, and implementation. According to Complete College America (2012), educators can reduce the need for college remediation by implementing the basic and common standards of reading, writing, and grammar in grades 9-12 and earlier. The
participants in this study all determined that remediation is an effective academic support tool for those students who are at academic risk of failure or being underprepared for college core coursework. Using NVivo 12 for Mac, the theme of remediation was referenced 234 times, which included the parent node remediation being referenced 99 times, and the child nodes intervention being referenced 71 times and implementation being referenced 64 times. The majority of the participants acknowledged that remediation of some form was used on their campuses; however, many warranted that remediation was reserved for students who fared poorly on the ACT or on subject area tests that were vital to either high school graduation and/or school rankings. High school participants from one of the schools reported that their school offered a two-semester long elective course for ACT remediation and that their subject area courses included bell-ringers that particularly targeted ACT tips and strategies, most notably in their English and Math classes. They admitted that no school wide remediation was in place for students who exhibited other academic weaknesses. They noted that this type of remediation was strictly up to individual teachers who perhaps offered after school or before school tutoring. One participant acknowledged that the primary aim of the ACT remediation courses was to help students who made a below average score on the ACT to improve their scores to proficient or above. They furthered that an increase in the number of students who were proficient or above increased the schools ranking as an A-school.

One other participant noted that her school had just implemented the state initiated elective courses SREB, at the 8th grade level and Essentials for College Readiness, at the 12th grade level in order to better prepare struggling students for college. She noted that these courses went beyond just preparing students for the ACT. She acknowledged that the Essentials for College Readiness Class was designed to help students move past their deficiencies and to move them into college level courses once they graduated. This participant went on to admit that this course had brought about a change in her student’s ACT score, especially in reading. She determined that the changes
took place because of the rigor of the course in the essentials of reading and reading comprehension. She also noted that the students had also advanced in their writing skills over the time of the course. Admittedly, she determined that the course was limited to only those students who fall at or below the ACT college entrance standards and should somehow be extended to other students who may have the ACT score, but who are still not prepared for college coursework. In looking at the node remediation, the terms rigor and relevance were noted as important points in the remediation process. Several participants noted that a possible remediation strategy for students who had academic learning deficiencies that might hinder their college preparedness was to allow those students to be a part of courses originally designed for advanced students. One high school participant determined through his experience with teaching dual enrollment Comp I courses that students who scored the basic score of 17 on the ACT were taught the same materials as students who scored 25 and above in the Comp I class. He observed that when faced with the rigor and standards set for the class, students who were identified as at risk rose to the challenge of the rigor and reach the standards set.

In an attempt to address the issue of remediation, another participant suggested that students who have similar academic difficulties become acclimated into learning communities that consisted of teacher interventions, counselor interventions, and administrative interventions. One participant insisted that with this type of remediation and intervention involvement, the student could see academic improvement. The participant noted that in these learning communities, the student could receive supplemental instruction with reading and writing labs, peer tutoring, and teacher instruction. These communities could be established for the student as early as sixth grade and be implemented through his or her 12th grade year. Another participant agreed with this idea by commenting that this is the model that is used by the community colleges for developmental education and that it could be successfully adapted for high school. Another participant voiced
concern that this type of learning community may lead to a student to low self-efficacy. However, another participant determined that in a learning environment where students are given all the tools to help them become successful, along with the expectation for them to succeed, they rise to the occasion and become self-motivated and self-aware. Other suggestions made concerning remediation, intervention, and implementation included the possibility of more courses like the Essentials for College Readiness course that could somehow co-exist with college coursework. One participant suggested a type of Pre-Comp dual enrollment course that matched high school standards and college requirements for students who were at risk. This course would, of course, require a collaborative effort between the high schools and the community college, much like the Comp I Dual Enrollment classes. A general consensus from all participants concerning remediation, intervention, and implementation was the focus on the need for a return to the teaching of the basic skills that students are lacking and the reiteration of repetition, immediate feedback, and one-on-one teacher student involvement.

**Theme 3: Basic skills.** The Qualtrics Phase I Survey data revealed that 6 of the 20 participants identified remediation in the basic skills of reading, writing, and grammar as the critical academic change that needed to be addressed in their institutions. In the coding of data using Nvivo 12 for Mac, when identifying student weaknesses, 207 total references were revealed. Of the 207 references, 71 specifically addressed the areas of reading, writing, and grammar. Although 133 of the 207 did not specifically name the individual skills, they were inferred to by participant comments as the areas of significant impact on student academic success. According to Bryk, Sebring, Allensworth, Luppescu, and Easton (2010), in order to see improvement in schools concerning basic skills instruction, the efforts of the school must reflect a collaborative and communal effort from the major stakeholders involved. The school must have a balanced instructional environment, which is inclusive of “instructionally-oriented leadership, a coherent
guidance system, and emphasis on student-centered learning.” In this type of learning
environment, the administrators are more than arbitrary law enforcers, they are instructional
leaders who along with guidance counselors and instructors understand that they have
accountability to parents, fellow teachers, and the students (Grubb et al., 2011).

In this study, participants noted that in many cases, in grade 9-12, the basic skills are not
emphasized, either because teachers do not like to teach them or because teachers feel that they
should have already been mastered. One high school participant admitted that basic grammar
skills are not taught consistently in Grades 7 through 9, and because of this by the time students get
to Grades 10 and 11, the skills that they should be competent in are lacking. She also noted that
because of curriculum mandates, there is no time to go back and try to catch students back up on
skills they have missed. Accordingly, when students take subject-area tests in the 10th grade and
the ACT in the 11th grade their English scores suffer. A community college participant voiced
that grammar, punctuation, and writing skills should be consistently taught grades K–12; however,
the skills should not be taught as independent skills, but instead as an integrated part of the writing
process. This participant determined that the missing component in the successful mastery of the
basic skills is the inconsistency of writing practices in schools. Grubb et al. (2011) determined that
most developmental programs use the “remedial pedagogy” approach to teaching the basic skills to
students who are in remedial or developmental courses. This approach allows for teachers to drill
the basic skills in “small decontextualized sub-skills,” which although exposes students to skills
that they are lacking, does little to constitute true learning of those skills (Grubb et al., 2011).
Smith (2014) concluded that this type of drilling of the basic skills alone does not contribute to
student success in attaining basic skills usage. Instead, he notes that by providing these skills as
part of rigorous and relevant components of academic materials that meet student’s real world
needs and that are embedded into curriculum content, teachers offer students opportunity for basic
skills absorption and understanding.

One of the study’s participants agreed that in order for students to have a better chance at
college readiness, there must be a return to the consistent teaching of basic reading, writing, and
grammar skills in elementary and grammar school. She also stressed that writing should be
utilized across the board from Grades 1–12 as the catalyst to promote the learning of the basic
skills. One of the high school administrators agreed that all students, regardless of their academic
deficiencies, should have access to learning that meets them where they are academically, but that
at all levels of instruction, they should have relevant and rigorous instructional materials that will
promote their academic growth and success. He noted that if provided with challenging materials
that stress the components of writing, reading, and grammar skills, students would be better
prepared for college level coursework.

**Theme 4: Technology.** The data collected for the fourth theme that emerged revealed a
connection between the participant’s perception of the major causes of academic deficiencies in
some students and in the ways to address those academic deficiencies. The data revealed that
40.9% of the participant responses indicated that both high school and college participants
perceived the use of technology in the classroom as a detriment to student learning, especially as it
is being utilized in classrooms currently. The study’s data also revealed that 9.1% of the
participants perceived that technology enhanced student’s chances at academic success and
increased opportunities for college readiness. When asked what changes in teaching have affected
student learning, one participant noted that the 1 to 1 initiative, which placed I-pads and computers
into the hands of all of the students in her school district, has been instrumental in robbing students
of their knowledge of basic writing and grammar skills. She contended that because of a
dependence upon the technology, students can no longer spell or use proper grammar. According
to her, the students rely on the computer to auto correct what they write, and in some instances, they rely on copy and paste techniques to write for them. Another participant agreed by stating that technology has crippled the students. She noted that students could no longer punctuate sentences or recognize grammatically incorrect text.

According to Glass and Kang (2018), this trend in education does exist. They noted that the consistent use of technology in the classroom as opposed to social integration and hands on engagement with learning materials leads to students to doing worse in their academic subjects. Glass and Kang (2018) furthered that student engagement is a key component to student learning. One of the participants in this study, who saw technology as a detriment to learning, commented that both teachers and students have become too dependent on technology and that there is a need for the classroom to be a place for both innovative learning and teacher and student based learning opportunities. Another participant advocated for the return to paper and pen for writing and for constructive critical thinking skills to be utilized in the classroom. In the study, both high school and community college educators agreed that technology has its positive attributes when utilized correctly in the classroom. They contended that technology could be an excellent tool to aid in remediation of students who have academic weaknesses. They also agreed that the programs set up for these students must be instructor monitored to ensure that students are actively engaged in the remediation and learning process. One agreed upon detriment of technology- based instruction, according to the participants in the study, is the improper use of technology by students and by instructors. One participant in the study noted that often, without proper monitoring, students are distracted by the different avenues that technology offers them.

As a positive proponent for the use of technology, a U.S. Department of Education (n.d) article noted that when students use technology to supplement their learning and teacher instruction, they are utilizing an active role in their learning experience. The article also
acknowledged that when students have an active role in their learning, their chances for academic success increases. According to the article, this active role in positive learning experiences helped to increase student motivation, self-esteem, and collaboration. The general consensus with all participants concerning technology was that properly used by teachers and students, technology had the potential to help students who had academic deficiencies.

**Theme 5: Assessment.** When asked to identify strategies used by their institutions to assist in identifying and implementing plans to assist students who had academic deficiencies the need for assessments at critical academic thresholds was mentioned. Uploading data from the Phase II Face-to-Face Interviews and the Phase III Focus Group Sessions, the word *assessments* appeared 36 times in the word frequency chart. The researcher created a parent node entitled *assessments* that had 30 references. Two child nodes were also created that were identified as positive perceptions and negative perceptions. A child node, positive perceptions, showed 16 references, and child node negative perceptions showed 8 references. In identifying the positive aspects of assessment, one participant noted that assessments at different levels of academic preparation were used in her district to determine academic preparation and academic need. According to her, these assessments are crucial in helping teachers to determine student ability and progress. Another high school participant acknowledged that with CASE testing, which is school level assessments of academic core objectives, shows instructors where students need remediation. One high school participant determined that formative and summative assessments in individual core curriculum classes are good gauges of student academic success or academic need. According to Guskey (2003), the assessments that are given by teachers, which include quizzes, weekly tests, writing assignments, and other assessments, are the ones best suited to determine what improvements in student learning are needed. Another participant in the study also insisted that these types of assessments must lead the teacher to follow up reinforcement for the academic
curriculum in which students assessed weakest. The participant also avowed that assessments are only successful when they are relevant to curriculum requirements.

In referencing the negative aspects of assessment, one of the participants in the study noted that too much assessment could harm students rather than lead them to college readiness, especially if assessments have no purpose other than for assessment’s sake. Guskey (2003) noted that immediate and relevant corrective instruction must follow assessment. One participant noted that in her high school setting too much emphasis is placed on assessment for school and district ranking. She also notes that remediation is mostly geared to ensuring that student subject area test scores and school rankings improve. Another thing emphasized by teacher assessment in most classrooms is the time factor, which does not allow teacher’s opportunity to reteach objectives not successfully acquired by students. One participant noted that because of class numbers and curriculum mandates, teachers are forced to move on to other objectives. This practice leaves more and more students further behind than others. Another participant noted that even though assessment is necessary, students must have immediate feedback and a course of action to correct student deficiencies, it can harm a student’s learning opportunities if it is not relevant and core connected. The data collected from the participants concerning assessment revealed that the educators perceived that in order for assessment to be beneficial to students with academic deficiencies, it must be useful, it must have immediate and corrective feedback and instruction, and it must be designed to allow students a second chance for academic success in the area of weakness.

**Implications**

The purpose of this qualitative study was to explore how educational stakeholders perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi. The study provided
an opportunity for these educators to express their views on the question of student academic deficiencies at the secondary and postsecondary level in core courses. The study also allowed stakeholders to explore their understanding of the gap that exists between high school requirements and college readiness indicators. The study provided information on how these educators perceive the need for change within their institutions and in the manner in which these problems are currently being addressed. Finally, the study provided information on ways to implement collaborative college preparedness and education courses to meet student needs prior to high school graduation.

The study’s results answered the research question that guided the study and added to the limited body of knowledge that exists concerning educator’s perceptions on the need for implementation of college preparedness and developmental education courses prior to college entry. The study’s results help to raise awareness of the need for the implementation of strategies and plans prior to increasing the number of students who leave high school prepared for college level coursework in core courses. The results also leave room for further exploration through close analysis of the data and the open and direct dialogue of the study’s participants on how these strategies can be implemented. The study is vital to the existing literature because it offers future researchers with data that informs the educational community on the understanding and perceptions of Mississippi educators on the issues of developmental education and how it should be addressed prior to a student’s high school graduation. The data collected from this study led the researcher to identify five themes that provided important implications for secondary and community college educators concerning students with academic deficiencies that affected college readiness. The following sections of this chapter present theoretical, practical, and future implications for secondary and community college educators. In addition, these sections will identify the strengths, weaknesses, and credibility of this study.
Theoretical implications. In this study, the researcher used Tinto’s (1975) retention model, Astin’s (1993) involvement theory, and Bandura’s (1993) self-efficacy theory. The first component of Tinto’s retention model is academic integration. Tinto’s seminal retention model (1975) theorized that students who integrate into their learning environment both academically and socially early in their academic experience increase their commitment to the institution and are therefore more likely to successfully complete their educational opportunity. Tinto’s theory essentially framed the mission of postsecondary education as educating, supporting, and retaining students, according to Laskey and Hetzel (2011). Tinto’s model was later used to provide a predictive model for the dropout policy of college students. Pascarella and Terenzini (1980) used Tinto’s theory of social and academic integration to develop a questionnaire and a scale that could be used to explain the dropout behavior among college students. The evidence identified by Pascarella and Terenzini’s scale provided evidence for the predictive validity of the constructs of the conceptual model framed by Tinto to identify why students either persist or drop out of college. Brady (1985) expanded Tinto’s model to explain why high school students drop out of high school. Brady suggested through his study that Tinto’s (1975) model of integration coupled with Pascarella and Terenzini’s (1980) questionnaire and scale were ideal for analyzing and explaining attrition among high school students. The study provided evidence to validate the function of a student’s academic and social integration on a student’s academic success. Finnan (1991) continued to explore the expansion of the Tinto/Brady models to explain the impact of social and academic integration on high school dropouts. Corbin (1998) sought to find the relationship between social and academic integration in the high school setting and a student’s self-perception. The findings of Corbin’s study concluded that student persistence and student academic success are directly connected to social and academic integration. The researcher also determined that Tinto’s model could be applied to high school students (Corbin, 1998, p. 33).
By looking at Tinto’s theory of integration from the perspective of understanding the needs of high school students with academic deficiencies, this study focused on the premise that if students who have academic struggles are identified and caught early on in their high school experience, they can through the combining of academic interventions and academic and social integration improve their academic performance. With proper interventions and academic guidance, these students can also change their personal views concerning their postsecondary directives and their abilities to be successful in high school as well as college. Daiek et al. (2012) noted that high school students who enter post-secondary institutions under-prepared shared the same deficiencies. These deficiencies included the lack of academic basic skills, the lack of directions and goals, the lack of motivation, the lack of self-confidence, and the lack of a belief in their own self-efficacy (p. 38). In this study, the participants perceived the need to initiate a collaborative effort to identify students who have basic skill needs early. In addition, the participants determined the need to align student support services, student social integration strategies, and postsecondary academic requirements. By doing these things, the data indicated that educators perceived that high schools and colleges could afford students greater opportunity for college readiness and college success.

A second component of Tinto’s retention model is social integration (Tinto, 2004, 2007). Research indicates that a student’s interaction with teachers, administrators, and peers can promote social integration and that integration can, in turn, stimulate a student’s sense of acceptance and belonging (Lewis, 2015). Tinto’s theory supports the ideology that integration as a two-part process holds the institution responsible for creating the conditions that contribute to the student’s overall academic success. According to his theory, if the institution establishes the classroom as a learning community and creates conditions where students can be socially integrated, the students can then become actors and interpreters of their academic situations, which can provide positive
and effective results in remediation and student preparation for college level work (Lewis, 2015; Tinto, 2007). In addition, social integration within these established learning communities can promote opportunities for collaborative sharing, interacting, and learning, which promote student self-confidence and academic success (Malnarich, 2005).

Another influential and relevant theory in developmental education is Astin’s (1985, 1991, 1993, 1999) involvement theory. According to this theory, the amount of time that a student devotes, physically and psychologically, to his or her academic experience, the greater investment the student makes to that experience. Astin’s (1993) theory of student involvement assumes that student success is intricately interwoven with events that happen both within and outside of the classroom environment of a postsecondary educational institution (Lewis, 2015). The theory also maintains that in order for an academic program or policy to be effective, it must aim to increase student involvement (Astin, 1999). Student involvement, according to the theory, extends beyond academic experiences in the classroom. It involves teacher-student interaction, student-peer interactions, campus interactions, and administrator–counselor interactions. Although developed as a means for understanding the components of student success in college, Astin’s (1985) theory of involvement has great bearing on the success of students who are attempting to achieve college readiness. Astin’s (1985) theory postulates that by changing its programs and policies to facilitate student needs, student interests, and student involvements, an educational institution can positively affect student success (Lewis, 2015).

Another theory that has a close connection to Tinto’s (1993) theory of involvement and student retention and Astin’s theory (1993) of integration is Bandura’s (1993) self-efficacy theory. This theory determines that a student’s belief in his or her ability to succeed can be positively influenced by his or her experiences with peers, instructors, and the environment. By building academic environments that allow students opportunity for involvement and that allows them to
find both failure and success in safe and challenging environments, the greater the opportunities for student academic growth, persistence, and success. Bandura (1993) determined that in these types of environments, students have a greater sense of self-efficacy. The theory furthered that students who believe in their success have a greater propensity to engage in behaviors that will lead to success.

In co-operative learning environments that promote positive self-perceptions, students work together with their instructors and their cohorts. With these types of continuing interactive academic and social environments, the potential for positive academic outcomes is increased. The success of a collaborative learning environment fostered through the initiation of remedial and developmental electives ninth through 12th grade is contingent upon implementation of the principles of Tinto’s (1993) retention and social integration model, Astin’s (1993) theory of student involvement, and Bandura’s (1993) theory of self-efficacy. In order for a learning environment to be collaborative, the learning environment takes on the attributes of constructivist–learning (Crawford, 2015). In this type of environment, the teacher is allowed an opportunity to re-define his or her role as the sole source of knowledge to a collaborative facilitator and partner with the students. The students, in turn, shift from passive learners to active learning members within the learning community (Crawford, 2015). The learning that occurs within this active learning community is intentional on the part of the student and his peers, and it involves self-assessment and peer-assessment, which not only facilitates learning, but that also acts as a validation for learning (Crawford, 2015). In this active learning environment, students gain independence and control of their learning, which allows them an opportunity for growth and expansion of their knowledge base and that leads them to confidence in their ability to succeed (Crawford, 2015).
In relating the three theories into the concept of implementing college preparedness and developmental education courses on the high school level, through a collaborative effort, educators must identify the students who need help by looking at the students’ areas of weaknesses and their previous learning experiences. Then, within the context of the electives and the curriculum focus, interject the ideas of integration, involvement, and self-efficacy along with the demands of the quality and rigor of instruction and learning key to student success (Astin, 1999). This study used Tinto’s (1993) theory of integration and retention, Astin’s (1993) theory of student involvement, and Bandura’s (1993) theory of self-efficacy to outline the conceptual framework that supported the assumption that a collaborative means for remedial and developmental education prior to high school graduation (e.g., grades 9-12) will result in a positive and significant impact on student success, retention, and college readiness. These theories were used to explore how the key stakeholders on the postsecondary and secondary level view this collaborative implementation and the impact it would have for positive change in student college readiness.

In this study, the data revealed that both secondary and postsecondary educators determined that academic and social integration for students early on in their academic careers were vital to student academic success. Data indicated that the educators perceived that students who are not exposed to the basic skills early in their schooling are at greater risk of falling behind their peers who were exposed to the basic skills at the pre-K level or earlier. Data from the study also revealed that educators perceived that once these students fall behind, because of curriculum demands, large class sizes, and testing protocols, teachers have little to no opportunity to catch these students up on the basic skills that they are missing. The data also indicated that because these students fall behind, their academic success is compromised, and they run the risk of becoming behavior problems in classrooms.
The participants in the study differed on when students with academic deficiencies should be identified and when interventions should begin; however, they did determine that a key factor in implementing a plan for a student’s academic success and college preparedness is the collaborative involvement of teachers, guidance counselors, and administration. The study’s findings also revealed that the participants perceived the need for the students to be actively involved in the remediation and learning process in order to achieve college readiness. The study further revealed that college participants saw the need for changes to be made in high school classrooms and curriculums in order to promote college readiness for the students identified with academic deficiencies. Based on the findings, both secondary and postsecondary educators perceived the need for grades 9-12 to see a decrease in the number of students in classrooms to accommodate for more one-to-one time between the teachers and students who have academic deficiencies. The data also indicated the need for more peer-learning or co-operative learning opportunities between students in high school settings. One participant noted that peer-partnerships are important in the learning and remediation process. She determined that this partnership encourages students to become independent learners who can “fend for themselves.” With this type of learning community, the students learn to self-motivate and self-remediate.

Based on the study’s findings, community college participants determine that high school classrooms and high school curriculums need to be modeled after community college classrooms and curriculums to ensure college readiness. By reconstructing secondary classrooms and curriculums to fit the postsecondary model, community college instructors determined that students would become acclimated to college rigor and college requirements early and thus be better prepared for college entry after high school. Another finding of the study indicates that college educators perceived the need for high schools’ curricula to require students to be more actively involved in the writing process. By allowing students the opportunity to write more,
rather than utilizing drill and memory for learning grammar and grammar related skills or limiting writing opportunities all together, high school teachers are ensuring that students learn the basic grammar skills and the basic skills of writing. The study’s findings determined that high school instructors would do well to adjust their curriculums to allow time for writing, for revision, and for feedback.

In addressing collaboration between community colleges and high schools, the high school participants addressed the need for more concern from community colleges for the students who may have academic deficiencies prior to graduation. One high school participant identified the need for high school courses that have community college input for students who have been identified with academic deficiencies. These courses according to the participant could be guided by the same guidelines as a developmental course at the community college. The course could provide the student with a high school credit and have an exit test that would allow the student to enter a college level course upon graduation. Another high school participant perceived the need for more active involvement of community college counselors, administrators, and developmental educators in the recruiting process for all students, not just those with high ACT scores. This study’s findings determined that community colleges and high schools would do well to establish a collaboration that could benefit students who are at risk of not being prepared for college.

Practical implications. The purpose of this qualitative study was to explore how educational stakeholders perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi. This study documents the thoughts of 20 educators, which includes teachers, administrators, and counselors from 3 high schools and 2 community colleges in an urban area of Mississippi, concerning the research issue. Using the results of this study, the researcher offered practical suggestions concerning how a community college and high schools can
collaboratively meet the needs of students who are at risk of being underprepared for college. Using the coded research data collected during the study, the researcher determined ways to address the research question and identified practical recommendations to guide educators and future researchers. The implications identified in the study are revealed and discussed in the upcoming sections.

**Early identification grades 8–12.** It is evident from the literature that more and more students are graduating from high school with high school accreditations and adequate ACT scores, yet unprepared for college. The issues that persist for these students who enter college underprepared are issues that begin early in their academic career. If caught early in the student’s school career, with proper interventions and follow up, these students could enter college without the need of having to take remedial and developmental courses. For this reason, educators would do well to implement ways to identify students who are at risk of academic deficiencies early in the student’s school endeavors. Intervention strategies can be set in place that will follow the students throughout their academic career. Interventions that could be initiated early in the student’s academic career could include district-wide and teacher-based assessments specifically designated to identify areas of student weaknesses. Analysis of student learning assessments could then be used to identify relevant and rigorous plans for remediation for students who have academic deficiencies. Administrators, counselors, and teachers from grades K–12 would do well to consider the initiating of a collaborative effort to structure a plan of intervention for at risk students that can be implemented throughout their academic career to ensure college readiness.

**Remediation, interventions, and implementation grades K–12.** In order to reduce the number of students who enter college underprepared, early identification would allow elementary, middle school, and high school educators opportunity to provide at risk students with opportunities for remediation. The results of this study indicated that participants perceived that success in
remediation is dependent upon the implementation of successful intervention strategies. Intervention strategies must begin as soon as student weaknesses are determined. Administrators, counselors, and teachers at the different academic levels would do well to consider developing intervention plans for students with academic deficiencies. These intervention plans would follow students throughout their academic career. According to the data given, intervention plans for students with academic deficiencies should include a plethora of implementation tools, many of which are used in community college developmental curriculums. The study’s results indicate that the participants perceive that in order to improve areas of academic weaknesses, the intervention plans should include allowing for students to be a part of smaller classes, having one on one teacher instruction, engaging in interactive learning, having exposure to consistent usage of basic skills, engaging in extensive reading, and utilizing consistent writing skills. The plan should also provide provisions for assessment, peer interaction, and instructor feedback.

**Assessment in grades K–12.** According to the data given, assessments are valuable instruments in determining student progress if used correctly. Participant responses revealed that assessments are often used for the sole purpose of student or school ranking. Accountability assessment has its place in education; however, it is the day-to-day assessments of individual teachers that can make the difference in identifying a student’s academic needs. The results of these daily assessments according to the study’s participants must not be ignored. Classroom assessments can be used to make needed improvements in curriculum instruction and in student intervention. Data results indicate that participants determined that in order to facilitate changes for students who have academic deficiencies, teachers must change their thinking concerning the purpose of classroom assessments. Analysis of participant responses revealed that educational institutions would do well to train teachers, as well as counselors and administrators in the usage of assessments as a gauge to understand and to determine students’ academic needs. Assessments are
an integral step in the learning and the intervention process. Assessments should never be given for the sole purpose of assessment but must be followed with corrective and relevant instruction. Properly used, assessment measures should be implemented at strategic points of the student’s academic process to determine areas of improvement or areas of needed improvement.

**Technology in grades K–12.** Based on the results of this study, technology has the potential of being a valuable tool in meeting the needs of students who have academic deficiencies. However, like assessment instruments, technology must be used appropriately in the classroom environment. The study reveals that in order for technology to have a positive effect on student learning, it must be used in conjuncture with teacher instruction and student learning. Technology should never take the place of the one-to-one instruction and learning experience between teacher and student. According to the study results, technology should be used to augment or to reinforce the learning experience. Teachers can also use technology as a means to assess student learning and student potential for academic growth. However, once the assessments are done, teachers are responsible for the strengthening of the areas students are found to be weakest. Technology can be used as a tool to give students and teacher immediate feedback on a student’s academic progress. The study results reveal that educators, both secondary and postsecondary would do well incorporate technology into their class curriculum; however, technology should be used to support the teaching and learning experience. Technology should not be used as the primary means of a student’s learning experience; there must be collaborative and co-operative interaction between teachers, students, and peers to ensure academic progress.

**Future implications.** This study offered several limitations. The first limitation identified was sample size. This study was initially limited to 24 educators who were selected through the convenience sampling method. These educators were to be selected from 4 branches of a Mississippi community college and four urban high schools. The total number of educators
represented was initially to be 12 from the colleges and 12 from the high schools; however, the total number of participants was reduced to 20. The high school participants included 11 members, and the community college participants included nine members. The schools involved in the study were also reduced: two community college branches and 3 high schools. These educators were representative of administrators, teachers, and counselors in these educational institutions. This number was small, which limited the scope of the study. However, the depth and quality of the responses outweighed the logistics of quantity. The goal of the study was to explore the perceptions of these educators in regard to the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi. These educators qualified as perceptive representatives.

The second limitation of the study was the generalizability of the specific local of the study (Creswell, 2013). This study was limited finally limited to two branches of a community college and three urban high schools in Mississippi because of availability. Therefore, the findings of this study may not be applicable to the perceptions of all educators at community colleges, colleges, or high schools in Mississippi or in the country at large. In addition, generalization was not the purpose of qualitative research. The third limitation considered in this study was the perspective of the researcher in regard to the interpretation of data from two of the community colleges and one of the high schools of the study. The participant’s teaching history at these institutions may have introduced researcher bias. For the transcription and coding of data collected from participants from these institutions, an outside person may have been feasible; however, the researcher chose to exclude an outside person from the study. In looking at these limitations, future researchers may determine that the study would be best served by including more high schools and community college branches to strengthen the data and findings. Future research may also attempt to
accumulate data on one particular facet of the study in order to expand and enrich the scope of the data found in this study.

**Strengths and weaknesses.** The purpose of this qualitative study was to explore the perceptions of educational stakeholders at selected community college branches and high schools in urban Mississippi. These educators reflected on their perception of the need for implementation of college preparedness and developmental education courses for students who have academic developmental deficiencies in high school. This study has several identifiable weaknesses. First, because of the limited scope of the number of institutions included in the study, the study’s finding may not be representative of the perceptions of all high school and community college instructors in the state of Mississippi. A second weakness identified in the study was the number of participants included in the study, and the disproportioned number of educators. Initially, the study was to be composed of an equal number of teachers, counselors, and administrators. However, because of the timing of the study, in Phase II Interviews and Phase III Focus Group Sessions, there were 11 high school participants and nine community college participants. The participant included: 1 high school administrator, two high school guidance counselors, and eight high school teachers; one community college administrator, one guidance counselor, and seven community college teachers. Although these weaknesses occurred in the study, the researcher believes that the study results included a rich and relevant understanding of the perceptions of these educators concerning how educational stakeholders perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi. The researcher also believes that the study met its purpose in identifying the perceptions of these educators. The researcher also determines that this research will add to the limited body of knowledge that exists concerning this topic and will
serve to further inform educators on how to meet the needs of students who are at risk of not being college ready, prior to their high school graduation.

**Recommendations.** The purpose of this section is to allow the researcher to make practical and feasible recommendations to future researchers concerning the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi. The recommendations in this section place emphasis on the significance of this study to future research. In addition, this section also provides a summary of the study’s results, identifies relevant and practical applications of those results for the sake of future research, and offers a conclusion to the study.

**Recommendations to community college administrators, counselors, and teachers.** In this study, high school educators realized that the community colleges offer students who have left high school underprepared the opportunity to improve their understanding of basic concepts missed while in grades K–12. These high school educators acknowledged the role that Mississippi Community College plays in providing remediation for the students who leave high school underprepared. The high school educators also acknowledge that there is a definite gap between what high school requires for high school graduation and what community colleges expect from high school graduates. The high school educators perceived that there is a need for collaboration between Mississippi’s community colleges and Mississippi’s high schools in order to bridge the gap that exists. This study’s results provided the researcher with data that substantiates the following recommendations for community college administrators, counselors, and teachers:

1. Mississippi’s community college administrators, counselors, and teachers should join with Mississippi high school administrators, counselors, and teachers to review current assessment measures for postsecondary readiness indicators and student placement in order to make necessary changes.
2. Mississippi’s community college administrators, counselors, and teachers should join
with Mississippi high school administrators, counselors, and teachers to develop
curriculum, similar to that of the dual enrollment courses, for students Grades 7–12.
These courses will have the components of college developmental courses. These
courses will be designed to meet the needs of students who would be identified as at
risk of being underprepared for college level course work.

3. Mississippi’s community college administrators, counselors, and teachers should join
with Mississippi high school administrators, counselors, and teachers to establish and
implement comprehensive, integrated, and long-term support programs for students
Grades 7–12 who at risk of graduating underprepared.

4. Mississippi’s community college administrators, counselors, and teachers should
partner with Mississippi high school administrators, counselors, and teachers to offer
students more avenues for future success that incorporate academic basic skills and
requirement with career choices Grades 7–12. These course types will prepare
students for real world experiences.

**Recommendations for high school administrators, counselors, and teachers.**

Understanding the changing dynamics of education with the move towards ensuring that today’s
students are ready for 21st century emersion into the technological world, high school curriculums
have adopted and enforced the 1-to-1 initiatives that allow all students access to technology. This
study’s findings determined that both high school and community college educators perceive that
technology is not being used to its full potential, especially in some K–12 classrooms. The study’s
results also indicated that a key component that is missing from education prior to high school
graduation is the implementation of “old fashioned teaching” and one-to-one feedback between
teacher’s and their students. The push for student-based learning is a key reason behind this
change. However, participants noted that one of the most substantial reasons for this change in teacher-student interaction is the change in classroom dynamics with the increase in the number of students to teachers in a classroom. Another significant change in classrooms that the study’s results identified is a decline in the teaching of the fundamentals—reading, writing, and grammar—and the increase in the teaching of subject area test tips and procedure guidelines. The study revealed that the participants perceive that all of these changes in K–12 education have impacted students who are at risk. The changes in classroom teaching, classroom curriculum, and classroom dynamics were identified in this study through rich and descriptive dialogue. The participants in the study determined that in order to reduce the number of students who leave high school underprepared, there must be adjustments made in these areas in grades K–12. The study’s results have led the researcher to make the following recommendations to high school administrators, counselors, and teachers:

1. Mississippi high school administrators and counselors should provide opportunities for community colleges to interact with high school instructors on ways to enhance and promote progress and future success of students who are at risk of being underprepared for college.

2. Mississippi high school administrators and counselors should collaborate with community colleges to align high school standards with college entrance and college placement requirements.

3. Mississippi high school administrators and counselors should push to have high school teachers align their individual lesson plans, course requirements, and classroom assessments meet college readiness requirements for all students.

4. Mississippi high school administrators and counselors should provide academic remediation guidelines for students at risk of not meeting college readiness by high
school graduation (not just for students who do not make proficient on SAT and ACT tests).

5. Mississippi high school administrators and counselors should train high school teachers how to use on-line tools for assessment purposes (Give the teachers real-time access to data that can impact how they instruct and remediate students who have academic needs).

6. Mississippi high school administrators and counselors should address the issue of classroom overcrowding by scheduling so that classrooms are limited to no more than 20–23 students per class to allow for one-to-one instruction.

7. Mississippi high school teachers should develop knowledge-based lessons that incorporate consistent writing that utilizes basic skills, inclusive of analytical reading and grammar practice.

8. Mississippi high school teachers should use technology as a learning and remediation tool rather than as the predominant teaching instrument.

9. Mississippi high school teachers should plan academic instruction to allow for one-to-one teacher interaction and student/peer interaction to ensure academic success, student socialization, and student self-efficacy.

Based on the responses and rich dialogue with participants in this study, one suggestion for change that will positively affect the outcomes for at risk students is for a teacher to be allowed to teach. However, the questions that have plagued education have been what do teachers teach and how do they go about teaching what they teach. An inherent need to impact change for at risk student is that secondary and postsecondary teachers realize that their teaching is not a segregated effort for these students. Instead, the successful preparation of these students for college level coursework is and should be a collaborative effort. There must be a connection between secondary
and postsecondary educators and institutions to bridge the divide that exists. This study’s findings clearly determined that a closer partnership between Mississippi’s community colleges and Mississippi high schools can give both institutions a clearer understanding of what students need to know and what they need to do to be ready for college-level coursework.

**Recommendations for future research.** In looking at the findings of this study, several avenues for future research present themselves. Since developmental education is greatly influenced by educational policy, future researchers may be interested in looking into policy issues concerning developmental education and the implications of initiating policy change. Another possible research study that can provide valuable data for developmental education might be research concerning assessment measures for placement into developmental courses. Further research study could also be done based on this study. More data could be gathered from other Mississippi community colleges and high schools in the state to determine specific needs for change in developmental education practices. A final possibility for research could be an examination of avenues for developmental program implementation in high school settings. The issue of understanding the need for implementation of developmental courses prior to high school graduation offers many avenues for future research.

**Summary of Chapter 5**

This chapter briefly identified the themes of this study and their relevance to the limited body of literature that exists concerning the need for developmental education courses prior to high school graduation. The researcher also discussed the relevance of the study’s findings to current practices in high schools and 2-year community colleges concerning students who are underprepared for college course work. The chapter noted the limitations of the study as well as its strengths and weaknesses. In addition, in this chapter, the researcher offered recommendations for approaches to getting students, who are at risk of having to take remedial and developmental
courses in college, prepared for college core courses prior to their graduation from high school.

Finally, the chapter indicated possibilities for future research on the topic of meeting the needs of students with developmental deficiencies prior to their graduating from high school.
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Appendix A: Letter of Invitation

Dear (Teacher’s Name),

My name is Cordelia Hayes-Godfrey. I am conducting a research study that will allow me to obtain an understanding of how educators at the community college and high school levels perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi. This study will be conducted through three phases, which includes Phase I, the collecting of data from structured questionnaires; Phase II, semistructured face-to-face interviews; and Phase III focus group sessions. You have been selected to participate in this study because of your association with core curriculum in English and because of your association with students who have deficiencies in the skills necessary for college preparedness. Your participation in this study will be greatly appreciated because it is believed that this study will give insight into how we as educators and how our educational institutions can better serve to prepare these students for college. Please understand that your participation in this study is strictly voluntary. Your volunteering to participate will in no way impact your position, tenure, or standing at your educational institution.

Please sign the letter of informed consent that is accompanying this letter of invitation if you choose to participate in this study. You may return the signed informed consent to me in the stamped addressed envelope provided, or you may sign, scan, and return it to me via e-mail at [redacted]. Upon receiving the signed consent form, I will contact you to confirm the dates of the face-to-face interview and to give details on focus group meeting times. The Phase I pre-assessment questionnaire will come to you through e-mail within one-week of receiving your signed letter of informed consent.
Appendix B: Letter of Informed Consent

Concordia University–Portland Institutional Review Board

Approved: 04/07/2018  
Research Study Title: College preparedness and developmental education courses in urban high schools in Mississippi  
Principal Investigator: Cordelia Godfrey  
Research Institution: Concordia University  
Faculty Advisor: Donna Graham, Ph.D

Purpose and what you will be doing:

The purpose of this study is to understand the perceptions of educational stakeholders on the implementation of college preparedness and developmental education courses for students with developmental deficiencies.

We expect approximately 24 volunteers. No one will be paid to be in the study. We will begin enrollment on March 10, 2018 and end enrollment on March 20, 2018. To be in the study, you will need to return this consent form and complete and return the pre-assessment questionnaire that is included here with this consent form.

Doing these things should take less than 15 minutes of your time. Once you have consented to participate in this study, you will be contacted with additional details concerning the three phases of the study, which will include:

- Phase I Early Assessment Questionnaire (25 minutes)
- Phase II Scheduled Face-to Face interview (20-30 minutes)
- Phase III Scheduled Focus Group (45-60 minutes)

Risks:

There are no risks to participating in this study other than providing your information. However, we will protect your information. Any personal information you provide will be coded so it cannot be linked to you. Any name or identifying information you give will be kept securely via electronic encryption or locked inside the researcher’s files. When we, or any of our investigators look at the data, none of the data will have your name or identifying information. We will only use a secret code to analyze the data. We will not identify you in any publication or report. Your information will be kept private at all times and then all study documents will be destroyed 3 years after we conclude this study.

Benefits:

Information you provide will help to determine how to ensure that students with developmental deficiencies can leave high school prepared for college courses. You could benefit this study by providing data concerning your institutions success in preparing these students, by providing information concerning areas of critical need in your institutions, and by providing additional information on how to better prepare these underprepared students.
Confidentiality:

This information will not be distributed to any other agency and will be kept private and confidential. The only exception to this is if you tell us of incidents of abuse or neglect that makes us seriously concerned for your immediate health and safety.

Right to Withdraw:

Your participation is greatly appreciated, but we acknowledge that the questions we are asking are personal in nature. You are free at any point to choose not to engage with or stop the study. You may skip any questions you do not wish to answer. This study is not required, and there is no penalty for not participating. If at any time you experience a negative emotion from answering the questions, we will stop asking you questions.

Contact Information:

You will receive a copy of this consent form. If you have questions you can talk to or write the principal investigator, Cordelia Hayes Godfrey at [email redacted]. If you want to talk with a participant advocate other than the investigator, you can write or call the director of our institutional review board, Dr. OraLee Branch 503-493-6390).

Your Statement of Consent:

I have read the above information. I asked questions if I had them, and my questions were answered. I volunteer my consent for this study.

_______________________________                   ___________
Participant Name                           Date

_______________________________                   ___________
Participant Signature                      Date

_______________________________                   ___________
Investigator Name                           Date
Cordelia Hayes-Godfrey                      3/4/2018

_______________________________                   ___________
Investigator Signature                      Date

Cordelia Hayes-Godfrey                      3/4/2018
Investigator: Cordelia Hayes- Godfrey; email: [redacted]
c/o: Professor Donna Graham;
Concordia University–Portland
2811 NE Holman Street
Portland, Oregon  97221
Appendix C: Qualtrics Survey Questions

Introduction

In this survey, we are interested in learning more about your understanding of, and your thoughts, feelings, and attitudes towards developmental education and college readiness prior to high school graduation.

When answering these questions, please consider your institutions current and past attempts to ensure student college readiness.

This survey is to help us understand how educational stakeholders perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi.

Your answers will be used in aggregate, and we will not be evaluating individual responses. As such, please be as honest as possible-there are no right or wrong answers.

Section I

In this first section, we'd like to learn more about some of the learning opportunities, programs, and activities that your school offers to promote student learning and academic success to students who have learning deficits.

1. How often do your guidance counselors meet with teachers, parents, or students concerning student's academic problems?

   Almost never       Once or twice per year   Every few months       Monthly Weekly or more

2. How confident are you that your school is providing students with developmental deficiencies the academic support that they need?

   Not confident at all   Slightly confident   Somewhat confident   Quite confidant   Extremely confidant
3. How much effort does your school put into helping your students achieve academic success in areas of weakness?
   - Almost no effort
   - A little bit of effort
   - Some effort
   - Quite a bit of effort
   - A tremendous amount of effort

4. In the past year, how often has your school provided remediation to students identified as having academic difficulties?
   - Almost never
   - Once or twice
   - Every few months
   - Monthly
   - Weekly or more

5. How often do your teachers help your students understand the content they are learning in school?
   - Almost never
   - Once in a while
   - Sometimes
   - Frequently
   - Almost all the time

6. In the past year, how often have you helped out with student academic remediation?
   - Almost never
   - Once or twice
   - Every few months
   - Monthly
   - Weekly or more

7. How often does your school help students to engage in learning opportunities and activities, which are educational outside of the classroom?
   - Almost never
   - Once in a while
   - Sometimes
   - Frequently
   - Almost all the time

8. How confident are you in your school's ability to meet student's learning needs?
   - Not confident at all
   - Slightly confident
   - Somewhat confident
   - Quite confident
   - Extremely confident

9. In the past year, how often have administrators visited academic classrooms?
   - Almost never
   - Once or twice
   - Every few months
   - Monthly
   - Weekly or more

10. How often do academic counselors talk with faculty concerning students having problems with academic courses?
    - Almost never
    - Once in a while
    - Sometimes
    - Frequently
    - Almost all the time

11. How confident are you in guidance counselor’s ability to help establish a developmental plan for students who are facing academic challenges?
    - Not confident at all
    - Slightly confident
    - Somewhat confident
    - Quite confident
    - Extremely confident
12. To what extent does your school place students according to their academic potential into classes?

Not at all  A little bit  Somewhat  Quite a bit  A tremendous amount

13. How confident are you in your ability to help your students deal with their reading or learning difficulties?

Not confident at all  Slightly confident  Somewhat confident  Quite confident  Extremely confident

14. Do you have any comments about any of your answers to the questions in this section?

Section II

In this section, we'd like to learn more about your perceptions of your school’s ability to motivate students who have academic deficiencies and their interactions at your school.

15. How well do the activities offered at your school match student's interests?

Not well at all  Quite well
Mildly well  Extremely well
Fairly well

16. On average, how well do students work independently on learning activities?

Not well at all  Quite well
Mildly well  Extremely well
Fairly well

17. How well do the teaching styles of teachers match students' learning styles?

Not well at all  Quite well
Mildly well  Extremely well
Fairly well
18. At your school, how well does the overall approach to discipline affect student's academic success?

- Not well at all
- Mildly well
- Fairly well
- Quite well
- Extremely well

18. At your school, what amount of effort is placed on meeting students who have academic deficiencies where they are and advancing their understanding and progress?

- Almost no effort
- A little bit of effort
- Some effort
- Quite a bit of effort
- A tremendous amount of effort

20. How much of a sense of belonging do students who are at risk feel at your institution?

- No belonging at all
- A little bit of belonging
- Some belonging
- Quite a bit of belonging
- A tremendous amount of belonging

21. How regularly do students read aloud in classes at your institution?

- Almost never
- Once in a while
- Sometimes
- Frequently
- Almost all the time

22. How well do you feel your teachers are preparing students for their next academic year?

- Not well at all
- Mildly well
- Fairly well
- Quite well
23. In general, how well do the children at your school learn from feedback about their work?

- Not well at all
- Fairly well
- Mildly well
- Quite well
- Extremely well

24. Do you have any comments about any of your answers to the questions in this section?

Section III

In this section, we'd like to learn more about your perceptions of the overall climate at your school.

25. To what extent do you think that students enjoy going to your school?

- Not at all
- A little bit
- Somewhat
- Quite a bit
- A tremendous amount

26. How much does your school value diversity of student backgrounds?

- Not at all
- A little bit
- Some
- Quite a bit
- A tremendous amount

27. How motivating are the classroom lessons at your school?

- Not at all motivating
- Slightly motivating
- Somewhat motivating
- Quite motivating
- Extremely motivating

28. How well do administrators at your school create a school environment that helps children learn?

- Not well at all
- Mildly well
- Fairly well
- Quite well
- Extremely well

29. Overall, how much respect do you think the teachers at your school have for the diversity of student's learning abilities?

- Almost no respect
- A little bit of respect
- Some respect
- Quite a bit of respect
- A tremendous amount of respect

30. Do you have any comments about any of your answers to the questions in this section?

31. Do special area educators support student success in content area classes?

- No Support
- Partial Support
- Full Support
32. Does the collaboration between special and general education teachers support student achievement?
No Support                  Partial Support               Full Support

33. Does the partnership between instructional coaches, remediation instructors, and classroom teachers support students’ need of additional academic help?
No Support                  Partial Support               Full Support

34. Do behavior support systems support students’ meeting English Language Arts Literacy standards?
No Support                  Partial Support               Full Support

35. Do academic interventions supports positively impact students’ needs? (i.e.: English language interventions, reading skills assessment, problem solving and critical thinking assessments)
No Support                  Partial Support               Full Support

36. Do professional learning opportunities support students’ needs in meeting English Language Arts Literacy standards?
No Support                  Partial Support               Full Support

Section IV

We would like to know more about you. Please take a few moments to answer the following questions.

37. What is your gender?    Female    Male

38. How long have you been in education?
1-10 Years       11-20 years      21-30 years      31 or more years

39. Which race/ethnicity best describes you? (Please choose only one.)
American Indian or Alaskan Native

195
Asian / Pacific Islander
Black or African American
Hispanic American
White / Caucasian
Multiple ethnicity / Other (please specify)

40. What is your position at your learning institution?

41. Do you feel that you are in a position to initiate change in accelerating student academic success and college preparedness? Explain!

42. Do you have any other comments, questions, or concerns?

43. What suggestions do you have for improving students' academic success and college preparedness at this school?
Appendix D: High School Educator’s Interview Questions

1. What strategic goals does your institution have for students in need of remedial or developmental help?

2. What tests are in place to determine if students are academically prepared for college, other than college placement tests?

3. What methods do you use to identify students in need of remediation?

4. What suggestions can you make to improve the identification of students with developmental deficiencies?

5. What professional development opportunities are provided to your faculty and staff that focus on ways to improve student academic success?

6. What credentials are required for teachers involved in developmental education?

7. What common characteristics exist among teachers who are most effective in preparing students for college level coursework?

8. As an educator, how do you diversify your instruction to reach students with developmental deficiencies?
9. What specific resources does your institution provide to better equip educators to teach students with learning deficiencies in English?

10. What specific remediation opportunities does your institution provide for at risk students?

11. How does your institution accommodate students who score low on college entrance tests?

12. What do you determine to be the number one factor for learning deficiencies in high school English students grades 9-12?

13. What recent changes have you seen in how students are being prepared for college?

14. What changing characteristics do you see in students and teaching environments that may have had an affect on student learning?

15. What institutional policy changes or funding changes have made a difference in how students are taught and on how students learn?
Appendix E: Community College Educator’s Interview Questions

1. What credentials must developmental instructors have to facilitate learning in developmental courses?

2. What common characteristics exist in developmental English courses that foster opportunities for student academic success and persistence?

3. What basic skills are students lacking when they enter developmental English classes?

4. What teaching strategies do you perceive to be most effective when working with students with developmental deficiencies?

5. What steps do you believe can be taken in grades L-12 to better prepare students for college?

6. What is your general opinion concerning developmental education at the college level?

7. What are the best practices being used in Mississippi community college to offset student lack of college preparedness in core courses?

8. What teaching strategies can be transferred from college developmental courses to high school settings to promote college readiness prior to high school graduation?
9. What factors do you think contribute to the high number of students in need of developmental courses in college?

10. What do you believe is not working with developmental education, as it exists today?

11. How is your institution addressing the problems associated with developmental education?

12. What academic interventions is your institution using to reduce student failure?

13. How might early detection and intervention in core academic subjects reduce the need for remedial and developmental courses in college?

14. What institutional policy changes or funding changes have made a difference in how students are taught and on how students learn in developmental education courses?

15. What professional development opportunities are provided to your faculty and staff that focus on ways to improve student academic success?
Appendix F: E-mail Notifications

(Tentative e-mail Notifications—Second notice of invitation to study, request for interview, scheduling of Focus Group Sessions)

Good Morning, ________________

As I indicated in my earlier correspondence, I am a doctoral candidate at Concordia University, and I am studying student developmental deficiencies and developmental education as part of my dissertation research. I am looking to document how educators at the community college and high school levels perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi. As an educator in one of the state’s leading educational institutions, I would like for you to be apart of this study.

I would like 45 minutes of your time for a confidential interview. I will record then transcribe and code interview, but the information that you share will remain anonymous and the conversations confidential. I will be at your campus on _________________. Will you have any free time to speak with me?

Thank you in advance,

Cordelia Hayes-Godfrey

Example Follow-up Email Contact

Good Morning, ________________.

Thank you for agreeing to be part of my dissertation. This is to confirm that I will be in ________________ on ________________ at 10:00 am to meet with you in Room ______ for about 45 minutes.

I look forward to meeting with you and documenting your responses to the questions that I have concerning the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi.

Cordelia Hayes-Godfrey
Example 2\textsuperscript{nd} Follow-up Email Contact

Good Morning, ________________.

Thank you for your time and furthering my research on last ____________ into our shared interest. It was great to get to know you and learn about your work. If you have any questions or are interested in my findings please let me know. I would be glad to follow-up.

Thank you again,

Cordelia Hayes-Godfrey

Example Follow-up Email Focus-Group Contact

Good Morning, ________________.

Thank you for agreeing to be part of my dissertation. Our face-to-face interview was very enlightening. Now, I would like to schedule the focus-group session that we discussed at the end of our interview. As agreed, you will meet with me, my associate, and nine other educators from several of the high schools and community colleges in the area. This focus group session will address some of the questions that we discussed in our interview and will open broader discussion on the issues of the lack of student preparation for college in core courses. The focus group session will also address common areas of concern and interests in developmental education as a collaborative concern for high school and college educators.

This is to confirm that the focus group will meet at ______________in room ____________on ________________ at ______p.m. The focus group session will last for about 45 minutes to one hour.

I look forward to meeting with you and the other focus group members and documenting your responses to the questions that I have concerning the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban high schools in Mississippi.

Cordelia Hayes-Godfrey
Appendix G: Institutional Permission Letter For Off Campus Research

Dear Dr. XXXX,

My name is Cordelia Godfrey, and I am an English instructor at Clinton High School. I am currently a doctoral student at Concordia University–Portland. I have just begun writing my research proposal for my dissertation. This study is a qualitative case study that is designed to understand how educational stakeholders perceive the need for implementation of college preparedness and developmental education courses for students with developmental deficiencies in urban schools in Mississippi. In this study, I hope to solicit the input of administrators, faculty, and guidance counselors at this high school and several others from surrounding school districts and community colleges. No students, documents involving student records, archived or confidential district data will be involved in this study. Any statistical data concerning the district or community colleges will be data identified as knowledge open to the public.

The research will be conducted using questionnaires, surveys, face-to-face interviews, and a small focus group session. These research steps will in no way interfere with regular high school activities. All participants will be identified anonymously in all research documentation and analysis. The high school, the school district, and any personnel involved in the study will also remain unidentified in the study. This letter and any correspondence from you will also be handled
with confidentiality. Data gathered from the study will be used to add to the body of knowledge concerning developmental education as a means to prepare students for college.

I am writing you to inform you of my research and to solicit your approval to begin my active research using administrators, faculty, and guidance counselors from the high school. Focus group sessions will be conducted off campus at the convenience of faculty participants.

Thank you for your time and consideration,

Mrs. Cordelia-Hayes Godfrey

Mrs. Cordelia Hayes-Godfrey
Appendix H: Statement of Original Work

The Concordia University Doctorate of Education Program is a collaborative community of scholar-practitioners, who seek to transform society by pursuing ethically-informed, rigorously-researched, inquiry-based projects that benefit professional, institutional, and local educational contexts. Each member of the community affirms throughout their program of study, adherence to the principles and standards outlined in the Concordia University Academic Integrity Policy. This policy states the following:

Statement of academic integrity.

As a member of the Concordia University community, I will neither engage in fraudulent or unauthorized behaviors in the presentation and completion of my work, nor will I provide unauthorized assistance to others.

Explanations:

What does “fraudulent” mean?

“Fraudulent” work is any material submitted for evaluation that is falsely or improperly presented as one’s own. This includes, but is not limited to texts, graphics and other multi-media files appropriated from any source, including another individual, that are intentionally presented as all or part of a candidate's final work without full and complete documentation.

What is “unauthorized” assistance?

“Unauthorized assistance” refers to any support candidates solicit in the completion of their work, that has not been either explicitly specified as appropriate by the instructor, or any assistance that is understood in the class context as inappropriate. This can include, but is not limited to:

- Use of unauthorized notes or another’s work during an online test
- Use of unauthorized notes or personal assistance in an online exam setting
- Inappropriate collaboration in preparation and/or completion of a project
- Unauthorized solicitation of professional resources for the completion of the work.
Statement of Original Work (Continued)

I attest that:

1. I have read, understood, and complied with all aspects of the Concordia University–Portland Academic Integrity Policy during the development and writing of this dissertation.

2. Where information and/or materials from outside sources has been used in the production of this dissertation, all information and/or materials from outside sources has been properly referenced and all permissions required for use of the information and/or materials have been obtained, in accordance with research standards outlined in the Publication Manual of The American Psychological Association

Cordelia Hayes Godfrey

Digital Signature

Cordelia Hayes Godfrey

Name (Typed)

04/13/2019

Date