EXPERIENCES OF MIDDLE AND HIGH SCHOOL AVID STUDENTS FROM AN URBAN SOUTH TEXAS SCHOOL DISTRICT WHO PLAYED COLLEGE READY-THE GAME

A Dissertation

by

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This dissertation meets the standards for scope and quality of Texas A&M University-Corpus Christi and is hereby approved.

Dr. Elsa Gonzalez Chair Dr. Israel Aguilar Co-Chair

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ABSTRACT

The college education gap between Latinas/os and whites has grown to 29 percentage points (Kolodner, 2017). I am a product of this gap which I believe begins early in life and is a result of the *divide and rule theory* proposed by Freire (2000). As a high school principal, I believe the solution to this problem lies within the creative minds of school principals/leaders. When a resource was not available to address the college readiness gap at my campus, I created one. The resource I created is *College Ready-the Game*. You can create one too!

The purpose of this qualitative study is to discover the experiences of middle and high school AVID students who played *College Ready-the Game*. John Dewey's theory of pragmatism guided the study. The intent behind the development of *College Ready-the Game* was to create a vocabulary resource that students can *learn by doing*.

The methodological framework was based upon tenets of Action Research. Patterns of experiences from participants of the same social group (students in the AVID program) that had played the college-ready game were observed through an interpretivist lens. Data from interviews were unitized and sorted into categories.

Secondary AVID classrooms who most widely use the game were chosen for the selection of participants. The classrooms are located in Title I and Non-Title I campuses to help ensure diversity of the participants.

The emergent patterns of responses conclude the following:

 Game-play of College Ready-the Game sparked conversations that developed college-ready vocabulary.

- Physical movement, competition, and repetition of game-play motivated students to learn college-ready vocabulary.
- *Community of inquiry* and a *college-going culture* were established through game-play.
- Bank of college-ready vocabulary empowered students to participate in collegetalk and earn social and cultural capital.
- The *social and cultural capital* led the students to the critical *predisposition* stage to pursue college with their counselors, peers and parents.

While the study adds to the literature of college readiness, future qualitative studies are recommended to uncover the experiences from a variety of student and parent populations.

Longitudinal quantitative studies are recommended to discover the effects of students who play
College Ready-the Game throughout their school years.

DEDICATION

First and foremost, I would like to dedicate this to my God who has provided me with the gifts of strength, passion, perseverance, and knowledge to pursue my doctoral degree. I would also like to dedicate this to my family whom I love with all my heart: * My mother and father who instilled faith, love, and core values in me. They helped tremendously when I started my college education by baby-sitting Vanessa and telling me they were very proud of me. *My husband, whom I can always count on to give me the confidence to "just do it!" He and I are literally soul mates and I could not ask for a better husband and father for my children. He has made me the woman I am today. I love him much more than he realizes! * My daughter, Vanessa, who is literally an angel. Her extremely caring and faithful heart, her angelic singing and her steadfast strength as a grown woman inspire me every single day. Her husband, Zach, is a gift from God and I love them both with all my heart. I love my Jonah for motivating me to finish my dissertation before he enters our world! * My son, Noah—my Booboo, was my rock when he was born. His intelligence and athleticism inspired me throughout his growing years. He has grown into such a handsome and strong young man and I love him with all my heart. My daughter, Samantha, my Sammi, has been in the thick of my doctoral program because she has seen me sitting on my bed with my laptop and books for thousands of hours. She never complained and I was confident that she knew that I would not miss any of her basketball games or special events. Her witty personality gave me that humor every time I needed it to keep me going throughout this program. I love her with all my heart. * My sister, Priscilla, or Prissy, who is so intelligent and inspiring to watch as a strong business woman, devoted wife, and loving mother. She and her family are our family's soul mates and I love them very much. * To Glenda

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Chapter 1

Introduction

Background of the Study

First Generation College Student

One of my main goals in life as a principal and leader of my school is to seek innovative methods to help more and more children reach their college and career potential. Throughout my life, I have witnessed discrimination against people simply because of their socioeconomic status or ethnicity. My personal experience is typical of first-generation college students, particularly those from low-income and/or minority backgrounds; it is an experience supported by research (Swail, Cabrera, Lee, & Williams, 2004). Several of my high school friends and I, all of whom happened to be Hispanic and economically disadvantaged, did not fully reach our potential until later in life. Unfortunately, we cannot recall school leaders who guided us into a career or college path. Perhaps the educators at that time did not realize that college could actually be for everyone. However, there were several other students from more affluent families who were evidently encouraged by educators to pursue college immediately after of high school. For some reason, this discrepancy has always remained with me. I wasted two years of my life right out of high school because I was not prepared or "ready." However, with the benefit of three decades of educational experience, I realize that the hardships I faced were part of my destiny and the engine that drives my desire to continually work harder as a principal to reach more children and prepare them to pursue a college or career path. At the age of 20, after two years of majoring in business, I made the bold decision to change my major and pursue the field of education, which is what I should have done in the first place. Education had initially been my true passion. I lacked the confidence or vocabulary to conduct well-informed conversations with my counselors about how to pursue an appropriate and personalized degree plan when I graduated from high school. I simply chose the field of business because that was what most people were choosing to do.

Education as a Career

After graduating from the College of Education at Texas A&M University-Kingsville (TAMUK), I taught at elementary and middle levels in schools that served predominantly economically disadvantaged students. After nine years of teaching and completing my master's degree, I became an assistant principal at a fairly affluent middle school. Four years later, I became the principal of George Evans Elementary School, located in the most economically disadvantaged part of Corpus Christi. The students were predominantly living at or below the poverty level, and a quarter of the population was homeless. I saw families living in dire situations every single day. The *Corpus Christi Caller-Times*, the local-newspaper, published an article entitled "Two Separate Classes" comparing two elementary schools: Mireles Elementary, from an affluent part of the city, and Evans Elementary. The article reported that Mireles parents and students focused their days on preparing for graduation and college, whereas the parents and students from Evans Elementary focused on "survival." My experience at Evans, coupled with the differences between student expectations at Mireles and Evans, are part of what drives my desire to prepare children for college and/or a career.

Later, I went on to serve as the principal of a middle school that was also predominantly educating students of low socio-economic status. My final stop as principal is at my current school, W.B. Ray High School. This school is the most diverse high school in the Corpus Christi Independent School District. The largest portion of our students is disadvantaged

economically, many of who are homeless, but approximately one quarter of the student population comes from families who are economically advantaged or considered affluent.

Relentless Pursuit of a Principal to Create an Instructional Resource

During my first year as a high school principal, I quickly noticed that a certain faction of the student population was much more prepared ("ready") for post-secondary education than was the rest of the student population. By "prepared," I mean they were aware of the norms and expectations of education after high school. The students who were prepared had parents who knew the kinds of questions to ask of counselors to help ensure that their sons or daughters took the classes that helped them prepare for college admission. They knew which classes to take early in high school in order to rank at the top of their class. This great discrepancy among groups of students fueled my desire to reach more students. I wanted to try to find some way to help ensure that "all" students had an equal opportunity to reach the top of their class and pursue the college or career of their dreams.

Most principals ensure that counselors and teachers at schools continually conduct college and career awareness sessions and parent meetings to educate students about college readiness. However, not many parents attend the meetings for valid reasons, such as long work hours or schools not doing more to reach out to them. Unfortunately, these meetings occur perhaps once a year and not many students retain the information given to them at the meetings. After much reflection, and after I conducted many searches for college readiness tools or activities, I realized that there was nothing available to purchase for my students, so I created a board game called *College Ready-the Game* for the purpose of utilizing it to assist more students in building their college readiness vocabularies that could lead to overall awareness about

college. As of today, there is no other board game or game app available that focuses on the topic of college readiness. The game is similar in format to games such as *Monopoly* or *Life*. Up to eight players can play at a time. Players move their mini-graduate pawns forward or backward by answering questions about real-world college readiness scenarios and vocabulary terms; players can also earn scholarships when they answer questions correctly or define vocabulary words like *tuition*. The object of the game is to graduate and earn the most scholarships.

I created a business (Limited Liability Company, or LLC) and had the board game copyrighted. Approximately a thousand board games have been sold online. The company is not profitable; many of the board games are simply donated to at-risk schools. An electronic version of the game is also available as a discounted app on the Apple web store. Although I am reaching students through the use of the game, I do not believe the games are reaching enough students. I have continually asked myself, "How can I reach more students?"

After observing many of my students spending countless hours on their smartphones, I realized one way I could catch my students' attention would be to create a game app that focuses on college and career readiness tips, delivering the information in a gaming format. The college and career readiness board game already existed, so I decided to use the board game as the foundation for the game app version.

Once I found the human resource, programmers, who could write the code for the game app, I wondered how to ensure that the game app would keep students entertained and engaged enough that they would play it repeatedly. According to my experience, I believe that an effective strategy to develop college readiness terminology is to utilize it repeatedly. As the saying goes, "If you don't use it, you lose it." I wanted students to play the game repeatedly in

order to learn and retain the information. Research in the book *Brain Rules*, written by John Medina (2015), indicates that information must be repeated in specifically timed intervals in order to provide the strongest method to fix memory in the brain.

I began my Qualitative Research Methods class during the time I began wondering about the creation of an educational game app. That first night of class, Dr. Elsa Gonzalez asked each student to consider a question we would like have answered. She also asked us to list adjectives that describe us. One of the adjectives I listed was that I am "entrepreneurial." During this class I asked myself, "So, what are you going to do about the fact that you cannot find a resource to help kids get college ready? Are you going to do something about it?" These questions were a clear indication that I would get even more value from the class than I had realized. I decided to focus my research on the question I had about the creation of a popular game app. This question was personal and important; thus, it fit the criteria Dr. Gonzalez had set for us. I conducted a case study, seeking information on what factors make game apps so entertaining and appealing that students play them repeatedly Additionally, I wanted to learn what college readiness terminology students needed to learn in order to build their vocabularies so they could participate in well-informed, inquiry-based discussions with their counselors. I envisioned that building this vocabulary would encourage more students to pursue college or career paths.

During the research conducted in Dr. Gonzales's class, the emerging patterns of interest that developed during the interviews, the analysis of interview transcriptions, and the qualitative methods of content analysis revealed the results of the study. Understanding the attributes that catch the eyes and attention of students is the key to ensuring that a game app will be popular and successful. As an investor of a game app, this knowledge provided me with relevant data to forward to the programmers as they wrote code for the app. The design of the game app was

based on the conclusions from the case study conducted in Dr. Gonzalez's class. If the game design approach is successful, then other game app developers may look to this research when they develop a new game app. Effective and popular game apps reach millions of people daily, increasing the possibility that good information about college readiness will become more widespread.

College as a Foreign Vocabulary

"College" is a word that enters every student's mind at one time or another. For some, the word "college" feels very familiar and is a natural next step in their lives. Some students have a predisposition to attend college. It seems almost to be innate, and there is no question that they will attend. Their parents and grandparents attended college, and so the cycle continues.

Unfortunately, for many minorities or underprivileged students, the word "college" is a foreign word. They hear the word and do not think it pertains to them. Higher education is not something that has been expected of them. *College* simply is not part of their vocabulary; thus, these students do not develop the social or cultural capital that exists in the lives of their counterparts. Two different researchers, Beers (2013) and Jones (2016), found that social capital equips learners to be immersive problem solvers, building a *culture of inquiry* in which *asking* and answering their own questions becomes the *centerpiece of the learning* process. A culture of inquiry develops the verbal facility to navigate the educational system and processes (Jones, 2016; Stolle-McAllister, 2011). Does the root of the entire college ready process begin with learning the words, the vocabulary?

So, how do students develop social capital to excel in life when they do not have the vocabulary to hold meaningful conversations and make critical choices that determine their post-

secondary future? How does the word "college" become part of everyday vocabulary? What can I do as a school principal if there are few to no resources available to build college ready vocabulary in my students? Perhaps I can create one of my own?!

Statement of the Problem

When students enter school, they are immediately situated into a "complex system of stratification influencing academic, social and emotional experiences" (Bernhardt, 2013, p. 209). The stratification is usually based on the students' reading or vocabulary levels. This process purposely separates students from one another, leaving the low-income or minority students at a severe disadvantage. This process reminds me of the *divide and rule theory*, where the oppressor separates out the oppressed in order to maintain power over them (Freire, 2000). I believe this is the root of the college education gap problem in our society.

The college education gap between Latinas/os and whites has grown to 29 percentage points (Kolodner, 2017). Latinas/os have had the highest high school dropout rate of all racial and ethnic groups (Swail, Cabrera, Lee, & Williams, 2004). Latina/o students from low-income backgrounds are less likely to attend college (Gandara & Bial, 2001) than their more affluent counterparts (National Association for College Admissions Counseling, 2004). The gap between low income Latinas/os and more affluent White students continues to widen despite the fact that the Latina/o population is growing (Swail, Cabrera, Lee, & Willliams, 2004).

Kolodner's (2017) report refers to a study conducted at Georgetown University's Center on Education, which was funded partly by the Lumina Foundation and the Bill and Melinda Gates Foundation. She concludes that academic preparation and racial disparities in K-12, in addition to the lack of resources at open-access colleges, play key roles in who graduates from college.

Many college and career awareness outreach programs and organizations are available to these students through websites filled with literature about college readiness, but students from underrepresented backgrounds often do not use these resources. Many economically disadvantaged parents are more likely to be working long hours at back-breaking jobs, with little to no time to be sitting at a computer and researching websites, much less visiting their children's school counselor on a regular basis. Their children are left to seek this information themselves. In considering the problem, several questions arise, such as: How many children are sufficiently mature and motivated to navigate through the very cumbersome post-secondary system? How can school principals and leaders reach students to help them become "college and career-ready?"

Purpose of the Study

The purpose of the study was to discover, through qualitative inquiry, the experiences of Advancement Via Individual Determination (AVID) participants after their teachers implemented the game, and to determine if those experiences facilitated the development of college-ready vocabulary. In addition, the results of the research will guide improvements to the game and make recommendations to AVID teachers and school principals for implementing the game in their classrooms. AVID is a global nonprofit organization dedicated to closing the achievement gap by preparing all students for college and other postsecondary opportunities (AVID, 2016).

The duration of the design and development phase of the first version of *College Ready- the Game* App took over one year. The results of the case study guided the creation of the colors, graphics, sounds, and content of the app. Since the recent launch of the game app, some

teachers are making use of the phone-based app, and others are using the original, physical board game.

Selection of Participants

AVID teachers are the primary purchasers of the *College Ready-the Game* inventory; they appear to be the educators who most widely utilize the board game as an instructional tool in their classrooms. Because AVID programs have implemented the game for a minimum of one semester, students in AVID classrooms were selected as participants for this research.

As a qualitative researcher, I purposely selected the AVID sample of participants.

According to Patton (2002) the logic behind a purposeful sample is to select information-rich cases wherein one can learn about issues pertinent to the purpose of the study. Erlandson (1993) explained that this type of sampling procedure seeks emerging insights about the relevance of the study. By interviewing a purposeful sample, I strove to meet the criteria of dependability.

According to Lincoln and Guba (1985), an inquiry must provide its audience with evidence that if it were replicated with the same or similar respondents in the same context, its findings would be repeated (p. 290). The dependability of the study relies on the "trackable variance" (Guba, 1981) and consistency of the responses (Erlandson, 1993). This study may be confirmed by tracking the data and the sources used to assemble the interpretations (Guba & Lincon, 1989, p. 243).

A total of fourteen AVID program students from four secondary schools participated in the study. There were eight middle school students and six high school students, ranging in grades 6 to 12, who were randomly selected by their AVID teachers. I chose to collect the perspectives of middle and high school students in two separate questions considering that the

most immediate concern for middle school students is most likely preparing for their high school path while high school students are most probably preparing for a college path.

Research Questions

The following research questions guided the study:

- 1. What are the initial reflections of a South Texas city's high school AVID students who played *College Ready-the Game*?
- 2. What are the initial reflections of a South Texas city's middle school AVID students who played *College Ready-the Game*?
- 3. What are the perspectives of the middle and high school AVID students in reference to the features of *College Ready-the Game*?
- 4. What are the perspectives of the middle and high school AVID students regarding college readiness terminology while playing *College Ready-the Game*?
- 5. What content needs to be revised from *College Ready-the Game* based on the experiences of the AVID students?
- 6. What experiences arise by playing *College Ready-the Game* that can offer opportunities for students to develop a college ready vocabulary that may build social and cultural capital?

Glossary of Terms

App is a term referring to a mobile application that provides an interactive learning or entertainment experiences (dictionary.com, n.d.).

AVID refers to Advancement Via Individual Determination, which is a global nonprofit organization dedicated to closing the achievement gap by preparing all students for college and other postsecondary opportunities (AVID, 2016).

AVID students are students who are enrolled in an AVID class and have a goal of attending college. The students are predominantly from lower socio-economic families.

College-Ready applies to students who are considered to be equipped with the knowledge and skills deemed essential for success in university or community college programs (edglossary.org, n.d.).

Gap is a term that means a break in continuity, space between two people or things (Merriam-Webster, n.d.).

Theoretical Framework

John Dewey's theory of pragmatism guided the study. Pragmatism is considered *learning by doing* (Field, 2015). Dewey's theory of pragmatism is aligned with one of the major influences on the creation of *College Ready-the Game*. Dewey's work also accounts for the decision to examine the experiences of students who play the game. The intent behind the development of the game was to create an educational tool that students can play and can *learn by doing*.

Additionally, vocabulary skills enable students to become drivers of their own college or career path. Kitcher (2015) noted that "conceptual progress is made by amending language so as to make it possible to pose significant questions that haven't previously been formulated" (p. 485). While *pragmatism* is considered learning by doing, *progress* consists of the process of overcoming limitations (Kitcher, 2015). Thus, "*Pragmatic progress* consists in overcoming some of the problems of the current state" (Kitcher, 2015, p.478).

If students can develop college ready vocabulary at a young age, perhaps these skills can help them avoid lagging behind their more affluent counterparts and challenge the *divide and* rule theory described by Freire (2000).

Methodological Framework

The research for this study was qualitative in nature. The methodological framework is based upon tenets of Action Research. After the completion of Action Research, discussions occur about what actions need to be taken following the action phase that involves planning, implementation, and evaluation (Glesne, 2011). Glesne states that Action Research has experienced popularity, particularly in education, as a way to improve practice (p. 23). In keeping with tenets of Action Research methods, I, as the researcher, was the primary instrument for data collection. During the observation phase, it was imperative for to write vivid, descriptive notes in order to allow the reader to, as Glensne states, "visualize the moment" (p. 73). She adds, "Accessing the perspectives of several members of the same social group about some phenomena can begin to say something about cultural patterns of thought and action for that group" (Glesne, 2011, p.6). As the researcher in this study, I looked for patterns of experiences that participants from the same social group (students in the AVID program) underwent while playing the college-ready game. My epistemological lens was interpretivism.

During the reflection phase, the researcher interpreted the data and communicated the various viewpoints of the participants (Glesne, 2011). The notes that refer to the viewpoints of the participants assisted the creator of the educational game and may be of assistance to potential educational game or app developers when creating educational games. In this form of Action Research, the researcher works with others as agents of change (Glesne, 2011). The change that is referred to is the one that may occur in the vocabulary development of the participants and which can be measured in additional research.

Limitations of the Study

The goal was to conduct the study in a qualitative manner; however, as with most inquiries, there were some limitations. The knowledge that *College Ready-the Game* was created by me, the researcher, might affect students' or teachers' willingness to be sincere in their reactions to the game. I, as the researcher, made efforts to ensure that the name of the creator was anonymous to promote open and sincere responses from the participants, free from any unintentional influence. Interviews from the participants who had knowledge that I created the game were coded differently from those interviews of participants who have no knowledge of who created the game. Because the game is relatively new, the research is limited to just the AVID classes that have implemented the game.

Significance of Study

As a school principal with a similar background of struggling students, my intent in creating the college readiness game was to help students achieve their potential when it comes to college and career readiness. I hope to inspire other school principals and leaders who are just like me to use their experience and ingenuity to create valuable instructional resources that can add to the advancement of college readiness or any other educational initiatives. While doing this study, I also want to inform, enhance, and improve the features of *College Ready-the Game*, so that school principals or leaders can confidently rely on it and implement it as a valuable educational tool for their college readiness preparation programs.

Nick Jimenez, former editor or the *Corpus Christi Caller Times*, recently wrote about the importance of recruiting more students to take Advanced Placement (AP) classes in order to prepare for college. He wrote, "The less involved parents may not know how to maneuver the ropes and pulleys of school work. They are unfamiliar with all those acronyms that litter the

path to college: SAT, pre-AP, AP" (*Caller Times*, 2015, p.2A). Jimenez affirms my reasons for creating the board game and the development of my game app. During game development, several articles were written about the subject of college and career preparedness. Given the recent calls in the media for an increase in college readiness, qualitative research on the effectiveness of educational gaming seems to be serving this purpose.

The language barrier is another potential issue. Many students that I want to reach have parents who speak only Spanish. To remove this barrier, I developed a Spanish language version of the game. The intent was for all parents to play, understand, and enjoy the game with their children, so that parents can also pick up some college readiness vocabulary. This process has the potential to build confidence among family units and inspire them to hold rich, well-informed conversations that will enable students to take the first steps in navigating the cumbersome college application process.

Developing an understanding about the unique patterns of experiences that students encounter while playing *College Ready-the Game* is significant to me as the creator of the game; therefore, vivid descriptions of the study were noted. The creator and any other readers who review this study will gain an awareness of students' reactions to different facets of the game. In addition, this study will provide educational lessons to educators and game developers about motivational factors of the game that tend to engage students in repeated activities that build the college-ready vocabulary of students. The study will give a bird's eye view of the thoughts and processes students experience while playing an educational game app. Furthermore, it will provide insight about the level of confidence that students gain when the process of college-ready vocabulary development occurs.

Chapter I Summary

Recently, the Texas Education Agency has added College Readiness components to its accountability system. These criteria should be introduced as early as elementary school. The present study is timely because it concludes that game-play of *College Ready-the Game* enriches the college-going culture of AVID classrooms and builds college ready vocabulary, which can assist school leaders who are seeking resources for planning and implementing college readiness lessons in their campuses.

Personally, the study is very important to me because of the experiences I faced as a child, as a first-generation college student, and now as a high school principal. My hope is that this study will contribute to current, college ready literature because it will be written primarily from the collection of the consistent patterns of perspectives of AVID students, who have currently played the game.

Chapter II

Review of Literature

Introduction

A search for the keywords "College Readiness" in any internet browser will produce thousands of websites and a wealth of literature and research on the topic. It is quite evident that there is an overwhelming need to address college readiness. After noticing an abundance of literature on the topic, one may ask, "Why? Is there really such a wide gap in college readiness among minority Latino students versus their White counterparts graduating from high school?" If so, then how significant is the gap and what could be the root cause for the gap? To gain a better understanding, it is important to review literature that addresses past and current trends of college readiness. Conley (2007) defined college readiness as "the level of preparation a student needs to enroll and succeed—without remediation—in a credit-bearing general education course at a postsecondary institution that offers a baccalaureate degree or transfer to a baccalaureate program" (p. 5). Included in this review is literature from Barnett (2016) who offers recommendations for building college readiness by implementing a path of momentum points that include specific college preparatory experiences and markers of educational attainment in high school that together provide graduates with a greater likelihood of college success. Barnett (2016) informs her readers that these critical points can form a "momentum chain" as a path by which students move with increased forward motion toward college readiness. In addition, it is also important to search for literature that recommends effective methods to help close the gap of college readiness among the various student groups. These issues underlie the literature review of this chapter.

Theoretical Framework

The study is supported by John Dewey's theory of pragmatism. Pragmatism is considered *learning by doing* (Field, 2015). According to Bruce and Bloch (2013), John Dewey's writing makes a significant link between school and society as it refers to education as the development and articulation of lived experience. These same authors also refer to the work of Charles S. Pierce (1958) in which he views pragmatism as pluralistic. Pierce (1958) believed that pragmatism is not so much one method or theory, but rather an approach that employs any tools that may increase understanding and achieve better practical consequences or learning (Bruce & Bloch, 2013). Pierce (1958) also believed that no individual could fully explore the practical bearings of any concept because we need to draw from a community of inquiry that brings out various situations, perspectives, and methods of inquiry (Bruce & Bloch, 2013; Pierce, 1958). Dewey's theory of pragmatism and Pierce's theory of the pluralistic nature of pragmatism align with one of the main influences for the creation of College Ready-the Game. The intent behind the development of the game was to create an educational resource that creates opportunities for students to play with other individuals and to *learn by doing*. My research is intended to reveal any emerging patterns of responses that indicate that game-play successfully helps students develop practical life skills, such as college readiness and the development of a vocabulary they can use to conduct inquiry-based conversations with their school counselors and enable the students to become drivers of their own college or career path. Kitcher (2015) noted that "conceptual progress is made by amending language so as to make it possible to pose significant questions that haven't previously been formulated" (p. 485).

While *pragmatism* is considered learning by doing; *progress* consists of the process of overcoming limitations (Kitcher, 2015). Thus, "*Pragmatic progress* consists in overcoming

some of the problems of the current state" (Kitcher, 2015, p.478). If students can develop college ready vocabulary by the theory of *learn by doing-learn by playing*, perhaps these skills can help them avoid lagging behind their more affluent counterparts with reference to college admissions.

College and Career Readiness Standards

In 2008, school principals and leaders were faced with a new challenge. The Texas Higher Education Board, the Commissioner of Education, and the State Board of Education approved incorporating college and career readiness standards into the Texas Essential Knowledge and Skills (TEKS). The standards consist of a multi-level framework that focuses not only on subject matter but also on the way it is organized and presented in the classroom (Texas College and Career Readiness Standards, 2008).

The context of this case study involves the public and political culture of the Texas Education's Agency's (TEA) accountability system and Public Education. As I searched for comprehensive analysis about the state of college readiness in Texas and the nation, I found no such data; however, the P-16 or P-20 Council was developed in 2000 to begin the collection of data. (Texas Education Agency, 2017). The most significant data I located about college readiness was the graduation rates of schools, but those do not necessarily measure college readiness because students who graduate from high school do not necessarily equate to students who are ready to enter college. The TEA Accountability System recently added Post-Secondary Readiness to Index 4. Index 4 outlines campus and district data such as Advanced Placement (AP) and International Baccalaureate (IB) scores and graduation rates (Texas Education Agency, 2017). Due to the dismal graduation rates highlighted by many legislators and public education antagonists, each high school is expected to meet the challenges of boosting their student

enrollment in Advanced Academics including AP, IB, Dual Credit, and Graduation Rates as a means to better prepare students with college readiness skills. While the goal of the TEA accountability system is to increase the number of students pursuing college, the challenge for the students and parents is knowing how or where to start inquiring and navigating the steps to pursue college.

Principals and other school leaders like myself would benefit politically by boosting the number of college ready graduates and increasing the number of students registering and taking IB, AP, and Dual Credit classes. Schools who excel in this area are noticeably recognized with Gold Star Distinctions by TEA and local newspapers that highlight the schools in their areas. This would be welcome news because it will provide the stakeholders an effective strategy to share with key people across the state, increase their numbers of students pursuing a college path, and promote an educated workforce.

The fact that the standards and accountability system focus on the expectation for *college* readiness to be presented in the classroom reinforces my desire to study the experiences of students as they participate in college ready activities such as the game-play of *College Ready-the Game*.

College Readiness Gap for Underrepresented Students

When students enter school, they are immediately situated into a "complex system of stratification influencing academic, social and emotional experiences" (Bernhardt, 2013, p. 209). This process purposely separates students from one another, leaving the low-income or minority students at a severe disadvantage.

Latina/o students from low-income backgrounds often lack access to the social and cultural capital needed in their home lives because most of these students come from parents or

families that have never experienced college. According to Cates and Schaefle (2011), it is critical that students of all colors and of middle to low socio-economic backgrounds establish an expectation to attend college. The educational attainment gap between low income Latinas/os and more affluent white students continues to widen despite the fact that the Latina/o population is growing (Castro, 2013).

In addition, findings suggest that "low-income and minority students face barriers to college access beyond their qualifications, and point to the importance of understanding the college application process and financial aid system" (Rodrick et al., 2009, p. 198). Roderick, Nagaoka and Coca (2009) referred to a study by the American Council on Education that estimates approximately one in five low-income students who are enrolled in college would likely be eligible for financial aid but never filed their Free Application for Federal Student Aid (FAFSA), which is mandatory in order for a student to receive aid. These same students are more likely than others to file after the established deadlines, which reduces their eligibility to qualify for aid.

Students of color who also live in poverty often attend the lowest performing schools. Unfortunately, these students carry the burden of school reform procedures and sanctions assigned by the No Child Left Behind (NCLB) and state-level accountability systems (Hursh, 2007; Hylsop, 2011). For example, high-stakes exit exams were originally created to ensure students were ready to enter postsecondary education (Holme, Richards, Jimerson, & Cohen, 2010). Holme et al. (2014) warn, "However, scholars have found that the high-stakes pressure associated with exit exam participation negatively impacts the test performance of students who are Black, Latina/o and/or English Language Learners, and is associated with an increase in dropout rates for urban high poverty schools" (p. 181). Many of these schools have fewer high

quality teachers and "limited access to a rigorous college preparatory curriculum such as Advanced Placement (AP) courses" (Welton & Williams, 2014, p. 183).

Of additional importance are the "forgotten middle" students (Delisio, 2009; Swanson, 2005), who are the silent students. They manifest these traits: (a) often sit in the back of the classroom and rarely raise their hands, (b) have overworked parents with little to no time to advocate for their child, (c) may be the first in their family to attend college, (d) never sign up for honors classes, and (e) earn average grades in classes (Swanson, 2005). Swanson (2005) stated that these middle students will graduate but they will not be prepared for college.

Despite the statistics and research about the college readiness gap of underrepresented students, educators and parents should not give up.

Social and Cultural Capital

One important social disadvantage is the fact that for the vast majority of English

Language Learners (ELLs) and minority students, the word, "college," is a foreign word (Seider, 2012). The students hear the word, "college" and do not think it pertains to them. Higher education is something that has not been expected of them. "College" is a word that simply is not part of their vocabulary, thus these students do not develop the social or cultural capital that exists in the lives of their counterparts. According to Cates and Schaefle (2011), social capital can be understood as specific knowledge or strategies that can be applied to the process that leads to college enrollment. Social and cultural capital are critical components. Cultural capital for students can be understood as information about norms and expectations, whereas, social capital refers to a student's acquaintances and social network (Cates & Schaefle, 2011). Stolle-McAllister (2011) defines social capital as a person's acquaintances and social networks; the more prestigious and well developed their acquaintances and networks are, the more capital one

is perceived to embody. Perna (2009) also wrote that parents' educational attainment can virtually serve as an indicator of cultural and social capital. Latina/os have the highest high school dropout rate of all racial and ethnic groups (Swail, Cabrera, Lee, & Williams, 2005) due to the lack of social or cultural capital. Beers (2013) stated that social capital refers to the skills that equip students to become natural problem solvers building a "culture of inquiry in which asking and answering their own questions becomes the centerpiece of the learning process" (Jones, 2016, p, 17). Cultural and social capital are interdependent. This capital is informational and includes verbal facility to navigate the educational system (Stolle-McAllister, 2011). A college ready vocabulary is part of students' cultural capital. How can students involve themselves in a culture of inquiry or verbal facility without encompassing a college ready vocabulary in order to think of the necessary questions and participate in conversations? Castro (2013) cites that an equity-grounded social science pushes us to rethink the notion of intervention by focusing less on "fixing" individual students and more on the socio-structural dynamics that reinforce their less advantageous status. He believes that the reason that students have not developed college readiness skills is "not because of something they did, but because of what they have been denied" (p. 14).

Predisposition

One of the widely-cited models for understanding the college enrollment process is that proposed by Hossler and Gallagher (1987), which is composed of three stages: predisposition, search, and choice. The predisposition phase is the most critical step and involves students making the decision to pursue a college education (Cates & Schaefle, 2011). Before a student can enter the critical predisposition phase, which can be defined as the "phase in which a student is more likely to pursue a higher education," students must first develop the vocabulary to make

the "critical decision of pursuing college" (Cates & Schaefle, 2011, p. 321). While ELL and minority students may have different reasons for not considering college, both groups may similarly lack social and cultural capital.

Significance of the Middle School Years

Literature on college and career readiness suggests that the middle school years are critical for future academic success, especially for the kinds of at-risk populations that are involved in much of the research (Schaefer, 2014). The lack of preparation in middle school, including lack of resources and current information about college and careers, begins to create a divide. Some students are launched toward success while others slide into what Balfanz (2009) described as "achievement chasms" that place students "on a path of frustration, failure, and, ultimately, early exit from ... high school" (p.13). In fact, many students who eventually drop out of high school begin disengaging from their educational experiences in the middle grades. Many of these students are students of color, English language learners, and low-income students (Alliance for Excellent Education, 2012; Balfanz, 2009; Balfanz, Bridgeland, Moore, & Fox, 2010). This disengagement is especially troubling in light of research findings that show students in the middle grades beginning to make decisions that impact high school (Trusty et al., 2005) and post-high school opportunities (Arrington, 2000; Osborn & Reardon, 2006; Trusty & Niles, 2003).

LeJeune and Orr (2012) provided recommendations for students in Transition or Special Education programs. They recommended that students start thinking and reading about possible careers that they are interested in exploring (2012). They also recommended that middle school students study about vocational rehabilitation programs. Students need to build a college ready

vocabulary in middle school in order to be able to understand much of the reading material that is available.

Trief and Feeney (2005) and Wolffe (2000) stated that students who are better prepared for transition from high school to college developed a strong sense of determination and self-confidence during middle school. Conley (2007) was also a proponent of alignment of middle and high school curriculum.

Significance of High School Years

While students are in high school, it is imperative that school leaders prepare their students for post-secondary success. Barnett (2016) outlines *momentum points* that she believes are critical to attaining college readiness in high school. They are *College Cultural Capital*, which includes exposure to norms and expectations. Another momentum point is *Academic Knowledge and Skills*, such as earning a good GPA and at least six hours of college credit. The final momentum point is *Non-Cognitive Skills*, such as opportunities to set personal goals and direction. High school principals can instill these momentum points through a range of supports that include tutoring, support for family and financial issues, and mentoring (Barnett, 2016).

Elements of College Readiness, College Knowledge, College Awareness

Anderson and Fulton (2015) suggested that college readiness can be measured by multiple means as opposed to just one college entrance test. They recommended using varied strategies which allow for a degree of creativity that can help students transition to college and will leave students better prepared throughout their college careers.

Lynch (2014) noted that Spanish-language education could be a start for ELL students and their families. Most ELL students are not familiar with American classrooms, and they are definitely not familiar with the university system. Lynch (2014) believes that instead of

spending so much energy on trying to change the minority student, we should instead be trying to adjust the teaching methods. In addition to focusing on students, educators and community leaders should also focus on helping the parents of these students (Vega, Moore, & Miranda, 2015).

Rodrick, et al. (2009) looked at the challenge for urban high schools in reference to college readiness for all. The authors looked at different methods of assessing college readiness, including (a) coursework, (b) achievement test scores (SAT, ACT), and (c) grade point averages (GPA). They also stressed the importance of core academic skills such as analytical writing and note-taking and non-cognitive skills such as behaviors like time management. In addition, they referred to *college knowledge*, which includes information to help students navigate through the college admissions and financial aid processes (Roderick et al., 2009). Rodrick et al. reiterated that, "While college knowledge has not traditionally been discussed as part of college readiness, it may contribute to significant disparities in college readiness by income and race and ethnicity which should be an area of particular interest for high school reform" (p.198).

As quoted in Welton and Williams (2014), "Baker, Clay and Gratama (2005) framed college readiness for underrepresented populations as three elements: (a) college awareness, (b) college eligibility, and (c) college preparation." A focus of this study is to discover if the experiences of playing *College Ready-the Game* can develop the vocabulary that leads to college awareness or college knowledge.

Developing a College-Going Culture

Strategies recommended by Rodrick et al. (2009) include the idea that high school leaders should "develop classrooms that deeply engage students in acquiring the skills and knowledge they will need to gain access to and success in college" (p. 202). They recommend an approach

of building capacity by providing resources that reach students and provide incentives that give clear, concise messages that connect students to real world successes for gaining college knowledge. High school leaders must establish a college-going culture to ensure all students are college ready (McClafferty, McDonough, & Nunez, 2002; Welton & Williams, 2014). This system-wide emphasis on college can mitigate the sociopolitical factors that conflict with the development of a robust college-readiness structure" (p. 184). In a college-going culture, all stakeholders make college an achievable goal. Stakeholders immerse students in the language of college. It becomes a part of their everyday lives. School personnel set high expectations, however, they also provide resources and support needed for post-secondary education (Oakes, 2003; Schneider, 2007). McClafferty et al. (2002) believed that a college going culture involves students in "college talk" (Welton & Williams, 2014, p. 185).

Welton and Williams (2014) referred to the premise developed by Holland and Farmer-Hinton (2009) that a strong college-going culture is a school environment that is "saturated with ongoing formal and informal conversations that prepare students for college" (p. 185). Holland and Farmer (2009) took a social support approach to establishing a college-going culture that fosters close relationships between students and staff and that inspires frequent communication about the post-secondary future of the students. This correlates with the research of Cates and Schaefle (2011) about the significance of social and cultural capital. Trust built among the student-staff relationships affords opportunities for rich, inquiry-based conversations. During the process, students gain a strong sense of self-confidence and a belief that college is achievable. Trust may enable a teacher to encourage a student to enroll in advanced academic courses that the student believes to be too difficult (Holland & Farmer-Hinton, 2009). All elements of this

social support approach must work concurrently to sustain a college-going culture (Welton & Williams, 2014).

School counselors working in settings with high proportions of first generation, low-income, and underrepresented minority students have the potential to act as a key source of social capital to promote participation in postsecondary education, reinforcing the need for highly qualified and trained counselors (Farmer-Hinton, 2008; Romer, 2011). Unfortunately, high student-counselor ratios handicap the counselors' role significantly. Principals or leaders who are aware of this handicap may use the information to support their message to central office when seeking additional allocation of counselors.

Hooker and Brand (2010) believed that disconnected youth need access to supportive adults who can help them make informed choices regarding postsecondary education and careers. In a college-going culture, adults and students can play the college ready game together to make connections with the youth and start forming relationships that center around conversations about college and careers. This game-play will help build the social and cultural capital among the youth.

Supplemental Support

Vega et al. (2015) cited that collaboration among schools and families and college preparatory programs are key to helping students achieve college knowledge. One example of a college preparatory program is Upward Bound. There is a federally funded program created under the Higher Education Act of 1965 designed to prepare students for college entrance (U.S. Department of Education, n.d., "Program Description"). As school leaders, we are expected to provide supplemental resources in areas where students and families are lacking support.

The Advancement Via Individual Determination (AVID) program is a college-readiness program targeting underrepresented students (Bernhardt, 2013). The AVID program focuses on creating a scholarly environment in the classroom and seeks to expand to the homes of the students as well. Gira, (2004, p.3) stated, "If you can create an intellectual environment and peer support, it can have long-term effects." This form of intellectual environment is evident "when a student enters an AVID classroom because college attainment becomes a central part of the discourse; it becomes part of the lexicon" (Bernhardt, 2013, p. 219).

Students who remain in the AVID program for several years can build their cultural capital. "Cultural capital is acquired over time as it influences an individual's way of thinking and acting" (Bernhart, 2013, p. 211). Successful AVID programs organize workshops that provide unique opportunities for parents and students to engage in discussions and in question and answer sessions. "The AVID curriculum directly addresses terminology such as grade point average, SAT, ACT, FAFSA...." (Bernhardt, 2013, p. 211).

Game-Play for Acquisition of New Knowledge

Research conducted with children suggests that game play is more conducive to learning and knowledge acquisition than the traditional directed classroom environment (Blumberg & Altschuler, 2011; Witherspoon, 2012, p. 352).

Problems are created in games through constraints that allow a trial and adaptation learning process that, as Gee (2007) describes, has to be "pleasantly frustrating" but doable, with any effort "paying off" (p. 36). Hopper (2011), states that players get continuous feedback loops about their progress even if they do not succeed. As players engage in game-play, they draw upon previous play experiences, eliminating possibilities that did not work, selecting alternative choices, determining the result, and then moving on to the next problem-posing interaction (p.

10). As they learn to read the game they select possible moves, they learn what works, they identify the best choices, and they develop theories about the reasons for some choices being better than others (p. 10). Game play literature supports the value of learning by doing or learning by playing. Various games place students into real-world scenarios that through game-play can enable students the opportunity to take certain risks and learn from their choices without suffering real-world consequences. Students learn from their choices even when they do not succeed because the problems or scenarios are presented in a game.

Chapter II Summary

The literature presented in this chapter supports the significance of early and continued preparation of college readiness for all students. For principals to provide a college-going culture, they must begin by building the vocabulary of their students. This vocabulary will help the students develop a more informed understanding of how schools operate and provide advantages, status, and access to multiple resources (Bernhardt, 2012). Through rich conversations and game-play, students will develop the social and cultural capital needed to enter the critical predisposition phase required to seek and attain higher education.

CHAPTER III

METHODS

The purpose of the study was to discover, through qualitative inquiry, the experiences of AVID participants after their teachers implemented the game *College Ready-the Game?* and to discover if those experiences facilitate the development of college-ready vocabulary. In addition, the results of the research will be used to guide improvements to the game and make recommendations to AVID teachers for implementing the game in their classrooms. The researcher believes that the cause of the gap between low-income minority students and students from more advantaged backgrounds lies in the fact that *college* is not part of the daily vocabulary of the students who lag behind their counterparts. The students who lack college ready vocabulary lack confidence and do not develop the social and cultural capital needed to enter the *predisposition* phase to pursue a college path (Cates & Schaefle, 2001). Purposive samples of AVID program students were chosen to participate in the qualitative study under the condition that the AVID teachers have implemented the game regularly for a minimum of one semester. The following research questions guided the study:

- 1. What are the initial reflections of high school AVID students that played *College Ready-the Game*?
- 2. What are the initial reflections of middle school AVID students that played *College Ready-the Game*?
- 3. What are the perspectives of the middle and high school AVID students in reference to the features of *College Ready-the Game*?
- 4. What are the perspectives of the middle and high school AVID students regarding college readiness terminology while playing *College Ready-the Game?*

- 5. What content needs to be revised from *College Ready-the Game* based on the experiences of the AVID students?
- 6. What experiences arise by playing *College Ready-the Game* that can offer opportunities for students to develop a college ready vocabulary and build social and cultural capital?

In qualitative research, the researcher may have personal goals and practical goals (Glesne, 2011). As a high school principal and the developer of *College Ready-the Game*, and as the researcher, I naturally have personal goals for this study in wanting the study to justify the need for creating the educational game. In applied fields such as education, researchers often have practical goals (Glesne, 2011). Glesne states, "That is, you hope that the research will help to change or accomplish something", p. 38). For example, this research may help principals change the way they are currently guiding college ready vocabulary development in their schools. At the culmination of this study, the researcher was hopeful that the participants who played *College Ready-the Game* would experience a change in their vocabulary that would make them more confident and inspire them to become drivers of their post-secondary paths.

Research Design

The research for this study was qualitative in nature. The theoretical framework was interpretivism because the central purpose for the research within the paradigm was to gain an understanding of the students' experiences after they played the game. The approach utilized was Action Research. Glesne (2011) states that accessing the different perspectives of a social group and analyzing the patterns of responses can indicate something about the phenomena that is occurring in that group. Vivid description and copious notes were recorded to help me as the researcher to visualize the moment (Glesne, 2011). I wanted to observe and reflect upon the

experiences of the students' reflections of game-play to see if phenomena could reveal some consistent patterns of perspectives from the groups. As Glesne (2011) explains, Action Research has experienced popularity, particularly in education, as a way to improve practice (p. 23). She continues, "Based on interpretivism, however, the cycles of research have evolved to observing, reflecting, and acting (Kemmis and McTaggart 1988; Stringer 1999), using primarily qualitative interviews and observations, as well as surveys and quantifiable data" (Glesne, 2011, p. 23). The researcher was the primary instrument for data collection through interviews and observations. During the observation phase, the researcher wrote descriptive notes in order to allow the reader to "visualize the moment" (Glesne, 2011, p. 73).

During the reflection phase, the researcher interpreted the data and communicated the various viewpoints of the participants (Glesne, 2011). The results were used to assist to guide improvements to the game and make recommendations to teachers and principal leaders. In this form of Action Research, the researcher works with others as agents of change (Glesne, 2011). The change that is studied is that which may occur in the vocabulary development of the participants. An ultimate goal was that college ready vocabulary would transform the participants into confident, college-seeking students, in addition to transforming the participants into independent decision-makers of their post-secondary paths.

Selection of Participants

The researcher utilized purposive sampling because this was naturalistic research. Erlandson et al. (1993) state, Naturalistic research seeks to maximize the range of specific information that can be obtained from and about that context. Purposive sampling requires a sampling procedure that is governed by emerging insights about what is relevant to the study and purposively seeks both the typical and the divergent data that these insights suggest (p. 33).

Additionally, Creswell (2007) stated that it is through purposeful sampling that the researcher chooses individuals who have extensive knowledge and understanding of the research purpose and will provide insight to the study. Participant selection begins with the researcher determining "who or what will be sampled, what form the sampling will take, and how many people or sites need to be sampled" (Creswell, 2007, p. 125). As the researcher, I determined that the AVID students have extensive knowledge of *College Ready-the Game* because they have played the game routinely for a minimum of one semester.

I interviewed fourteen students from an urban South Texas school district who were enrolled in the AVID program at two middle schools and two high schools. The specific schools were chosen based on the diverse socioeconomic areas of the city. In this city, the socioeconomic demographics of the schools are vastly different. The selected AVID teachers had implemented College Ready-the Game for a minimum of one semester in their classroom. Each AVID teacher was invited to randomly select five students to participate in the interview process. Only students who returned their Parent Consent form and were present at the time of the interviews participated. One of the middle schools that was chosen feeds into the AVID program of the neighboring high school. The middle school students were chosen from a southside middle school and a westside middle school of the city. High school participants were chosen from the north side high school and westside high school of the city. One middle school has AVID students who feed into one of the high school's AVID program that is included in this study. By interviewing students in at least one common feeder pattern, the researcher may gain some unique knowledge about the benefits the game may provide to students as they prepare for their high school AVID program. In addition, the selection of these specific schools enables the

researcher to gather information from two different campuses that are comprised of differing socioeconomic demographics.

In addition, I asked the AVID teachers to refrain from informing their students that I am the creator of *College Ready-the Game* to limit any bias in participant responses. Because of small-town publicity, at the beginning of each interview the researcher asked the students if they knew who created the game. Interviews from students who were knowledgeable of the game's creator were coded differently from those who did not know who created the game.

Research Site

The interviews were conducted in the AVID classroom of each participant. Erlandson et al. (1993) recommend that, "The selection of a suitable site is a critical decision in naturalistic research, because the inquirer will conduct his or her study in a particular native setting to observe and record the day-to-day operations of the environment" (p. 53). While observing the personal reflections of the participants as they described their experiences of playing *College Ready-the Game*, as the researcher, I took copious descriptive notes that would enable a reader of the study to "visualize the moment" (Glesne, 2011, p. 73). Detailed descriptions of the reflections and perspectives of the participants who played the game were noted. I looked for patterns of comments and reactions of the participants. In addition, journal notes were written to describe the AVID classroom, which was the natural setting of game play.

Participants' Roles

Subjects of the study were students purposely selected by the researcher because they routinely played *College Ready-the Game*. I as the researcher was the interviewer, observer, and learner. Glesne (2011) recommends the researcher to be a curious observer learns and listens from and with the participants who in this case played *College Ready-the Game*.

Each participant was assured complete confidentiality through the implementation of an informed consent form. Participants were interviewed individually. The researcher interacted with the participants at their respective campuses to explore different perspectives that emerged as they reflected about game play and responded to the researcher's questions. Interviewing both middle and high school level participants provided key information about the readiness level of the different stages of vocabulary development that appeared to be learned from playing *College Ready-the Game*.

Participants were interviewed with a set of 11 open-ended questions. The interviews occurred either before or after school and during the AVID class time. Glesne (2011) encouraged researchers to review interview questions to make certain to address them all and take note of what emerged as consequential and not as anticipated.

Data Sources

Fourteen interviews were conducted utilizing predetermined questions. The interviews were scheduled based on the availability of the participants. Open-ended questions were created to provide a structured interview with the participants (Glesne, 2011). The interviews were audio-recorded. A reflexive journal was maintained to record observations made of the students as they were interviewed. As the research evolved through the interview process, it was important to record notes about the learning that the researcher experienced while observing the participants. These analytical notes were the "recordings that occur to you during observations" (Glesne, 2011, p. 76). Analytic notes are sometimes referred to as observer comments (Glesne, 2011).

A tape recorder, laptop, legal pads, and many writing utensils were utilized. File folders were created on the laptop to store the interviews of each participant separately. The laptop remained at my home and was accessible only through a secured password.

Thematic Analysis-In Vivo

Glesne (2011), informed his readers that data analysis involves organizing what you have seen, heard, and read so that you can determine what you have learned and make sense of what you have experienced. "Working with the data, you describe, compare, create explanations, link your story to other stories and possibly pose hypotheses or develop theories" (p. 184). The primary analysis method used was thematic analysis. Glesne described Thematic Analysis as, "The focus of analytical techniques on searching through data for themes and patterns" (p. 187). This method of analysis is important because the purpose of this research was to obtain valuable and authentic insights from the AVID educators and students who had first-hand experience with College Ready-the Game. In addition, when items are popular, patterns and themes are evident and begin to reveal the attributes and content of the game that contribute to the experiences.

The process of data coding was utilized. The main source of data was the transcripts of notes. Glesne (2011) explained, "With data coded, you read through all the pieces of data coded in the same way and first try to figure out what is at the core of that code" (p. 187). Coding assists in exploring the connections of categories and themes. (Glesne, 2011) stated, "In qualitative research coding, you eventually want to show relationships between things" (p. 195). Coding data can also be considered indexing or categorizing. (Glesne, 2011) noted, "As a result of coding your data, you are creating a framework of relational categories for your data" (p. 195). Coding allows the researcher to see consistent patterns or themes more easily.

Scenarios were used in note taking as a means to describe certain experiences and patterns of reactions that occurred during interviews as students reflected on their experiences of playing *College Ready-the Game*.

Reciprocity and Ethics

Glesne (2011) alerts the researcher, "In some kinds of research, reciprocity is assumed to be a matter of monetarily rewarding research subjects for their time" (p. 177). While this may be true for some kinds of research, the intent of the researcher in this study was to emphasize to the participants the valuable personal development attained in their college-ready vocabulary. Participants were reminded that the study would also provide key information to educational game developers, which might help the next generation of potential college ready students; an informed consent form was used. Names of the participants and their schools were not used. Pseudonyms were assigned to each participant. This process maintained the confidentiality of the participants. As the researcher, I also refrained from announcing to the participants that I am affiliated with the creation of *College Ready-the Game* in order to create an objective experience for the students.

Trustworthiness

In an effort to ensure qualitative validity steps were implemented to check and guarantee that the qualitative data collection was accurate (Creswell, 2011, p. 211). To confirm the *dependability* of the analysis, only the consistent and emerging patterns of responses were utilized. Member-checking also occurred. Creswell (2011) recommends data be shown to the participants, who are then asked to reflect on the findings. I revisited the campuses and shared the transcriptions with the participants, asking them to confirm that the responses were accurately reflecting their perspectives. In addition, I listened to the audio recordings repeatedly

to ensure no conflicts occurred with the handwritten notes. The audio recordings were and are maintained in a locked file cabinet.

In vivo coding was used to label the units of cards. While sifting through the stacks of coded cards, the cards were separated into categories and then subdivided into sub categories. The categories were then scrutinized by comparing them to the handwritten transcriptions, typed transcriptions, and audio recordings. Observations and photos were taken of the artifacts in the classrooms to give a more vivid understanding and reflection of the similarities of the collegegoing atmosphere that permeates the AVID classrooms. Responses were coded with a Y or an N to signify if the participants were aware that the researcher is the creator of the game. I categorized the Y responses and the N responses to analyze any differences in patterns that may have evolved between the responses in the two groups. The patterns revealed no differences. Because of the steps that were implemented, I as the researcher have complete confidence in the trustworthiness of this study.

Chapter III Summary

A qualitative study grounded in interpretivism as the methodological framework was conducted: Tenets of Action Research and Thematic Analysis were used (Glesne, 2011). In vivo coding and member-checking were implemented. Participants were selected by purposive sampling. The site was selected to provide the participants an environment where they were comfortable so that observations during the study emerged freely.

Chapter IV

Data Analysis and Results

As a busy high school principal, conducting interviews of students during the summer and at the beginning of the school year proved to be a challenge. This challenge motivated me to strengthen my perseverance skills and encouraged me to seek the best possible information during the interviews. I felt it was important to include detailed perspectives from each participant. I wanted to get to the heart of their experiences of playing *College Ready-the Game* and view their experiences through an objective lens.

Context of the Study

I, as the researcher, made one trip to each of four different campuses in a South Texas city to conduct the interviews. As I sat and waited for the interviewees to come into each classroom, observations were noted about each AVID classroom to gain a better understanding of the context in which the students engaged daily. Erlandson et al. (1993) stressed that naturalistic inquiry is dependent upon context. The authors state that naturalistic inquiry stems from the assumption that all subjects in an inquiry are bound together by a complex web of unique interrelationships that results in a mutual simultaneous shaping of a description (Erlandson, 1993, p. 16). In addition, researchers obtain direction for dealing with the same setting in the future or for further inquiry about similar settings. Erlandson explains, "While not perfect, the best predictor of an organization's or community's behavior in the future is its behavior today" (p. 17).

Much of the literature reviewed for this study emphasized the significance of a collegegoing culture. It was important for the researcher to notate the context in which the AVID students regularly participate to determine whether or not they are immersed in a college-going culture while playing *College Ready-the Game*.

I initially contacted four AVID teachers in a school district located in a South Texas city to begin the process of randomly selecting students to participate in the interview process.

During the visits to each AVID classroom, the researcher took copious notes about the details observed. The notes were written on the same tablet paper as the transcriptions of the interviews. Details about the classrooms, the schools, the artifacts in the classrooms, the conversations and the people were recorded. This level of detail was important because it provided descriptions of the settings that students were experiencing, giving the researcher a clear picture of the surroundings that students were in during game-play.

Participants described their experiences based on the context in which they played the board game or game app. The results of the patterns and themes found in the descriptions may deepen the understanding of the experiences of the participants.

AVID Classrooms

In order for I as the researcher to gain a clear understanding of the culture in which the AVID students were involved during their AVID class, copious notes of artifacts, setting, and teacher-student relationships were taken. McClafferty et al. (2002) believed that a college-going culture involves students in "college talk" (Welton & Williams, 2014, p. 185). Welton and Williams (2014) referred to the premise developed by Holland and Farmer-Hinton (2009) that a strong college-going culture is a school environment that is "saturated with ongoing formal and informal conversations that prepare students for college" (p. 185). Holland and Farmer (2009) took a social support approach to establishing a college-going culture that fostered close

relationships between students and staff and that inspired frequent communication to occur about the post-secondary future of the students.

A brief description of the characteristics that describe the culture of each AVID classroom is depicted in Table 1.

Table 1

Description of Characteristics Contributing to the Culture of AVID Classrooms:

#	Location of Campus	Туре	College Artifacts	Setting	Teacher
1	West side	High School	Pennants	Whole Group Desks	AVID Trained
2	South side	Middle School	Pennants	Desks in Groups	AVID Trained
3	West side	Middle School	Pennants	Desks in Groups	AVID Trained
4	North side	High School	Pennants	Desks in Groups	AVID Trained

Participants

Interviews were conducted with fourteen students. I anticipated up to sixteen participants, but two of the participants were unable to be interviewed due to absences. Demographic data for the participants are presented in Table 2. Participants were coded in the order they were interviewed to identify them with their campuses. The first numeral represents the campus number. The second numeral represents the number of participants from that campus. The third code refers to whether the participant is aware the researcher is the creator of the *College Ready-the Game*. The code is either a Y or an N. Y signifies that the participant is aware that the researcher is the creator of *College Ready-the Game* and N signifies that the participant is not aware of this fact. For example, 2.1.N. indicates the participant was the first interviewee from the second campus and he was not aware that the researcher created the game.

The majority of the interviews lasted approximately 30 to 45 minutes. Each participant was interviewed individually. All of the questions were open-ended questions. As the

researcher, I transcribed in writing as each participant responded to the questions. The participants were audio recorded in case the researcher needed to review any of the responses more thoroughly. Once the participants appeared to have completely answered the interview questions, the researcher proceeded to the next question. I did not want to appear in any way to pressure the participants for more elaboration after they were asked to elaborate at least once. However, I acknowledge that future research may provide an even deeper analysis of the experiences.

Table 2

Grade and Gender of the Participants and if He/She Knew Who Created the Game

Participant	Grade	Gender	Did he/she know who created game Y/N
1.1 Norma	9	Female	N
1.2 Michael	9	Male	N
1.3 Eric	9	Male	N
1.4 Adam	9	Male	Y
2.1 Noah	8	Male	N
2.2 Rudy	8	Male	Y
2.3 Zach	8	Male	Y
2.4 Vanessa	8	Female	N
2.5 Samantha	8	Female	N
3.1 Jonah	8	Male	N
3.2 Prissy	8	Female	N
3.3 Noey	8	Male	N
4.1 Brenda	12	Female	Y
4.2 Glenda	12	Female	Y

Of the 14 participants, six were female and eight were male. Their grades ranged from 8th to 12th grades. Of the 14 participants, four were aware that the researcher created *College Ready-the Game*.

Campuses

The campuses were labeled in the order that I contacted them to schedule the interviews. My personal interviews began at the campus that is labeled Campus #3. As one walks onto the different campuses it is easy to recognize there are notable differences in the age of the campuses, but there are several similarities in reference to the artifacts that are on display. At the west side middle school, Campus #3, it was difficult to drive through the pothole stricken road near the campus. The pockets of green lawn grass were scarce. It was evident that the campus was over fifty years old due to the architectural design of the outside hallways and the older brick building. However, upon entering the building it is evident that the personnel and students have adopted a school-wide college-going culture. College pennants and cutouts of graduation gowns hang on display throughout the entrance and along the central indoor sections of the campus. The campus is clean and presentable. It is comprised of 512 students; 72 % are labeled economically disadvantaged, 12% are in Special Education, and 4% are labeled ELL.

The feeder high school, Campus #1, is situated nearby. Based on the mainly indoor design of the campus, it appears to be a younger campus than the west side middle school. While there are posters throughout the building depicting school spirit and important information, college pennants or AVID artifacts are not as prominent until one enters the AVID classroom area. The campus is clean and neat, and the staff is friendly. The campus is comprised of 1,632 students; 77% are economically disadvantaged, 10 % are in Special Education, and .019% are ELL.

At the front entrance of the north side high school, Campus #4, one quickly notices the sign signifying there is a fall-out shelter available. This indicates that the building was built sometime in the 1950s, when fall-out shelters were first built. The high school contains many

posters of school spirit and important information, but AVID and/or college artifacts are mainly displayed near the library, AVID hallway, and the front office and counseling areas. The shiny marble floors and hardwood doors indicate the campus has been well preserved. The campus serves 2,082 students; 66% are economically disadvantaged, 8% are in Special Education, and 1% are ELL.

The south side middle school, Campus #2, appears to be a more recently designed building than the other schools. All classrooms are indoors. There is carpet and white tile throughout the floors. Beyond the entrance of the building it is immediately evident that AVID is a large part of the campus. There are AVID posters and college pennants that adorn the hallways. This campus enrolls 1,066 students; 35% are economically disadvantaged, 6% are in Special Education, and .006% are ELL.

One of the middle school and two of the high schools are Title I campuses and one middle school is a Non-Title I campus. Campuses designated Title I are comprised of a majority of students who are considered economically disadvantaged based on the fact that the majority of their students qualify for the free or reduced-price lunch program. The researcher found the school's Title I status to be significant because it indicates that the participants come from homes of lower socio-economic status, which indicates the students have varying background experiences from which to draw when participating in school activities.

The demographics of the campuses may be diverse from each other, but the researcher noted that there were common artifacts in all of the AVID classrooms in each campus. Every AVID classroom had student-created displays of college pennants. The AVID logo was also prevalent in all AVID classrooms. The *WICOR* (Writing, Inquiry, Collaboration, Organization, Reading) posters and *Costas Level of Thinking* were displayed on posters and various, bright

colors of construction paper in each AVID classroom. In three of the four campuses where the AVID teacher was present, discussions between the AVID teacher and students centered around college ready topics that included college ready vocabulary. In the AVID high school classrooms, the students discussed aspects of the college application process, such as the Common App and FAFSA. In the middle school classrooms, discussions centered around the topic of the students' Pre-AP courses and career planning. Each AVID classroom was set up with desks clustered in groups or paired to face each other so as to encourage collaborative learning. Desks were not in rows. One of the goals of AVID is to promote a college-going culture, therefore the settings of their classrooms must promote collaboration and conversations which prepare the students for what they might encounter in college. A college-going culture should be established in high schools to prepare students to become college ready (McClafferty, McDonough, & Nunez, 2002). Furthermore, Welton & Williams (2014) added that this systemwide emphasis on college can mitigate the sociopolitical factors that conflict with the development of a robust college-readiness structure (p. 184). The researcher noted that when stakeholders, such as the AVID teachers, immersed their students in the language of college, it appeared to become a part of routine discussions. There was no hesitation or confusion in the discussions between the students and their AVID teachers when the students were presented with college ready vocabulary or questions.

Participants in the Study

The core of this study lies in the reflections and perceptions of the participants; therefore, their feedback is of utmost importance. I will begin with the first interviewee, Norma, at Campus #1. She was a female 9th grader at a Title I high school. The student was not aware that the researcher is the creator of the game. This AVID classroom had student-created college

pennants displayed around the room. The desks were in groups of four and faced each other. The AVID logo was prevalent on posters around the room. There was a large, white projection screen in the front of the room. Students entered the classroom asking the teacher, "Oh, are we going to play the game today?" I believe they asked her that question because they saw that I was there to interview students about the game. The teacher winked at me and informed the students that they would not be playing that day but would later in the week. She informed them that they would be working on their AVID binders to insure they were organized for all of their other classes. AVID guidelines consider organization an essential skill of college readiness. The fact that the discussion between teacher and students occurred naturally supports the evidence that the AVID classroom is promoting a college-going culture.

Norma stated that she had played the game at her previous middle school and in her current high school. She appeared confident by sitting up straight and looking directly at me during the entire interview. She said that she was first in her family to pursue college. This participant shared her experience of playing the game app version of *College Ready-the Game*. The participant chuckled as she explained that her class was placed into teams by their AVID teacher, and her team named themselves, "The Drop-Outs." She pointed to the front of the room and described how the game was displayed onto the large, white screen while teams competed against each other. The interviewee stated, "I *like* learned something new every time I play the game." She said she learned about Ivy League schools, FAFSA, tuition, and room and board. She said she previously knew what the most prominent Ivy League schools were, but she had learned from the game that Dartmouth and Cornell are also Ivy League schools. She mentioned that she had to do push-ups when she answered a question incorrectly and noted that she actually appreciated the requirement of active, physical movement within the game. The interviewee

stated that she also liked that the game has dice and is very competitive. She said the playing cards reminded her of the games she played with her friends when she was younger. She remarked that the distinct sounds of the game app when the player answered wrong or right made the game fun and made it easier to remember the correct answer for next time. She described the sounds as, "Cha-ching," and "Buzz!"

The interviewee explained that the game helped her learn that there are many other things that people need to know to prepare for college, including FAFSA, business schools, time management, money management, and the importance of arriving for SAT and ACT testing on time. She explained that the game makes players move backward on the board whenever players get an answer wrong, which "affects the amount of scholarships you get." She said she was surprised to learn how expensive college enrollment is. This participant had played the app and preferred it to the board game because she said it was more accessible. Even though this participant has played the app, she has not played the Spanish version.

She indicated that she would like to introduce the game to her 7th and 8th grade cousins and to some of the juniors on her tennis team. She recommended that parents should play the game with their kids because, according to her, "Many parents are not financially able to give them the experience of college."

The one thing she recommended to change about the game was that the winner should be the one that graduates first and earns the most scholarships even though the other students have not graduated yet. This differs from the way the game is currently played, which is that the game does not end until all players have graduated.

Michael is a male 9th grader. He was not aware that the researcher created the game. He had played the app and board game version of the game in his AVID class and also played it in

his AP English class. He preferred the app because he likes seeing it on the smartboard; however, he had not played the Spanish version of the app. He explained that he enjoys playing the game in the class because, "it's competitive against your classmates." Among the things he said he learned were: "how many years it takes to earn a Bachelor's and Master's Degree what it costs for dorms and tuition." He said, "College is not always going to stay on top of you. If you slack off you lose money, like in the game if we lose."

The participant described the game as, "an old-fashioned game like retro, not old but like familiar." He explained that the sounds of the game, "give you a boost of confidence when you get an answer correct." Additionally, he mentioned that, "It opened my eyes to financial things that I wasn't thinking about with college." He reiterated that he learned it was important to find the right college because there are different kinds.

The participant shared that he would recommend the game to other students because he said, "It gives them a fun, educational game that might change their life; it might expand their knowledge from what they have." He reiterated that parents need to play the game because it is hard for parents to know about college if they have not gone to college. He said, "It opens their eyes and they can bond with their kids."

Eric is a male 9th grader. He used to be in the gifted program in middle school, which is reflected in the mature and articulate manner in which he speaks. He was not aware that the researcher created the game, however he did mention that his teacher said that someone from another high school gave her the game. The participant was unaware that the researcher was from that high school.

The participant described his experience with the game as "competitive and exciting because we are in groups." He prefers playing the app because the class plays in groups. This

participant has not played the Spanish version of the game app. He said the sounds of the game "break the tension either bad or good." He said that when he gets an answer wrong, he finds out what the correct answer is anyway. As he was pointing his finger to his head he said, "It helps you stick the answer in your mind when you hear that buzz."

Among the things he said he learned from the game was vocabulary, listing terms such as FAFSA, scholarships, and transition into essays. He said, "When she (teacher) gives us a college assignment, I wouldn't know what half the words mean but because of the game, I do."

In discussing his favorite features of the game, he immediately mentioned, "The little characters because they are very diverse." He also likes the distinct loud game sounds when an answer is correct and the buzz when the answer is wrong. He chuckled and said, "It's like a rude awakening when you get it wrong." He used a familiar phrase that many interviewees used in describing his experience of the game; he said, "It opened my eyes. If I can start learning now like about credits then I can take like AP and Dual Credit." He said that he did not think he would have known about important things such as Dual Credit if he had not played the game. He mentioned that he learned about the high cost of tuition. This participant expressed that he also learned the importance of due dates and the difference between early action in college admissions.

The participant recommends that people who should play the game are people who do not have parents that went to college. He said the game will tell parents what to expect.

According to this participant, "I know AVID would've taught me some of this vocabulary, but the game is a competitive environment that gives me an extra incentive to learn."

Adam is a male 9th grader. This participant was aware that the researcher is the creator of the game. The researcher attempted to reassure the participant that there is no right or wrong

answer to any of the interview questions and that his open and honest responses will be very helpful whether they are good or bad comments about the game. The participant smiled and lowered his shoulders as if relieved.

The participant stated that the game is fun when he plays with his friends. He indicated he preferred playing the board game version and had not played the Spanish app version. He explained that he enjoys the board game version because players can move their own characters and pick out their own cards to read aloud. He said he likes that it is competitive. He said his favorite parts of the game are the different characters. He said, "They are like different and not exactly the same. Like they're different races and different ethnicities!"

He recalled that the game helped him "go more in depth" with his counselor about the classes he needed to take for next year. He said he learned *why* he should take Pre-AP classes and not *just to* take Pre-AP classes. He said that before playing the game he did not know about college admission tests and he did not know about GPA or about how much college costs.

He did not recommend any changes to the game. However, as the researcher, I wondered if his answer was influenced by the knowledge that I, the researcher, created the game. His answer to this question was given in a quick and short manner.

The participant does recommend that parents play the game because "instead of just the kid learning, the parent can be able to guide their kid too."

Noah is a male, 8TH grader. We are now at Campus #2 which is a middle school AVID classroom in a Non-Title I school. The neighborhood surrounding the school is made up of newly designed brick homes. The average cost of homes is over \$200,000 as noted on the *For Sale* signs that are posted in a newly constructed subdivision located near the school. In Corpus Christi, these homes are in the higher value section of the city. The AVID classroom was similar

to the high school where I first interviewed participants. The classroom had similar artifacts, such as student-created college pennants, hanging on the walls. The background dialogue between teacher and class of students was focused on researching different careers. This AVID teacher also directed the students to take out their Cornell notes from their AVID binders. Cornell notes are a form of note-taking that the AVID program requires. Note taking is a skill that is considered by AVID to promote college readiness. The fact that this teacher-student discussion was naturally occurring and based on the artifacts that are displayed in the classroom indicated to the researcher that a college-going culture is regularly promoted in this classroom.

Noah, a male 8th grader at Campus #2, was not aware of where his teacher purchased the game and was not aware of who created the game. He began by stating that his class had played *College Ready-the Game* approximately nine times during the year. He described it as, "Pretty fun; it's kind of like Monopoly. It tests your knowledge and you like earn money." He had not played the app or the Spanish app version. Among the things he listed that he learned were how many years it takes to get a Bachelor's Degree and what he needs to do to get into Division 1 schools. He stated, "I think Division 1 schools have better teachings."

His favorite part of the game was the use of dice because it reminded him of playing Monopoly, which he mentioned was his favorite game when he was younger. He chuckled and stated, "I like the dominance when I play against my friends! I like to dominate."

He said the game helped him prepare for graduation by spurring him to decide to attend certain colleges. When he met with his counselor he expressed that the game helped him because he needed to know GPA, SAT, Scholastic Aptitude Test, PSAT, and Class Rank. He continued by saying that he now knows what it means to take higher-level classes to "be able to place higher on GPA."

Something he would change about the game is the amount that people earn because, "sometimes in college you won't be given a lot of money. In college, everything seems expensive."

Approximately 25 minutes into the interview, Noah appeared to become anxious to finish the interview. He began looking around the room and appeared preoccupied. When the researcher asked him if he would recommend the game to parents he simply said, "No." He finished by stating that he enjoyed playing the game because he liked having more money than his friends at the end. He said he liked to dominate and did not want to elaborate any further during the interview. The interviewer attributes the subject's loss of interest at the interview to the age of the subject. The subject is a middle school student and this age group of students is not as patient and mature as the high school aged students.

Rudy was a male 8th grader at the same Non-Title I middle school as the previous participant. He was aware that the researcher is the creator of the game. The researcher attempted to reassure him that there were no right or wrong answers and that his honest responses would be appreciated. The participant smiled and nodded his head in agreement.

When asked about his experience with the game, the participant responded that it helped him with a lot. He said that he learned a lot more about college from playing the game. When the participant was asked to elaborate, he said that he learned about different degrees and about what classes are needed to get the class ranking necessary for college admission.

The participant had not tried the app at all. His only experience was playing the board game. Therefore, there was no need to ask the participant any questions about the app version.

He added that he would recommend the game to his friends because "they could learn about college and different degrees." As for the question about recommending the game to

parents, he stated that "the game could help parents help out their kids with questions or vocabulary." When the participant was asked to elaborate, he was unable to do so. This participant's responses indicated shyness, perhaps because of his awareness that the researcher was the creator of the game. When asked if he would change anything about the game, he stated that he would add more opportunities for earning money during the game and add more exercises for players to do. He indicated he found the exercises enjoyable, stating, "had to do them! I like the exercises." When asked to elaborate, he said he liked getting up and moving around. He also mentioned that he liked the colors of the game but, again, he did not elaborate and appeared ready to end the interview, as indicated by repeated glances toward a digital clock on the wall.

Zach was an 8th grade male at the Non-Title I middle school. This participant was also aware that the researcher is the creator of the game. Apparently, the previous participant mentioned it to him. I attempted to reassure him that his open and honest responses were needed in order for the research to be effective. The researcher told him that there was no right or wrong answer. He simply said, "OK," and smiled.

When asked about his experience of playing the game, the participant stated that it was fun and competitive. He said, "There were things I didn't know and after the game I learned from some of the questions and cards." I asked him to elaborate and he said, "Like how long it takes to get an Associate's and a Bachelor's Degree. And, I kind of know what GPA is." He explained that, when he met with his counselor he told her he wanted to be a physical therapist. During the interview, he rolled his eyes he and stated that he now has to take Pre-AP Science classes. He said, "I know I need to take some classes now instead of later in order to help me later. I need to start thinking about an Associate's degree too."

The participant's favorite part of the game was the, "Dollars that you need! As soon as I saw the game I saw the money and I knew it would be cool to play because of the money."

The participant had not played the app, having experienced only the board game. When asked if he had the chance to change anything, he said he would make the game bigger and longer. Additionally, he said he would add information about the kinds of conferences that colleges are in. He suggested players go around the board four times for a Bachelor's degree and two times for an Associate's degree. As the researcher, I found his statements surprising and creative. He also expressed, "Parents should play the game, so they can help their upcoming child for college."

Vanessa was an 8th grade female. She was not aware that the researcher is the creator of the game. When asked about her experience with the game, she appeared nervous, her voice shook, and she fidgeted continuously with her hair. I tried to calm her down by complimenting it, and she seemed to relax slightly. Her first response about her impression of the game was that the game was fun and it was "financial." I asked her to relax and know that there is no right or wrong answer. The participant then said that she had a good experience and that she liked that it had little people in the game, referring to the pawns in the game that are replicas of people. She explained that her class plays the game during *Team-Building Thursdays*. She said, "It's a good way for team building." She has not played the app version of the game. She followed up by saying that "most games can be boring, but this game makes you get up and do jumping jacks." She said she liked "how the game tied scenarios and exercises into college facts." The participant stated that she learned about the Ivy League, GPA, Class Rank, and the type of classes she needs to take in high school to help in college. She said that the game "talked about credit classes that help you for college," and that had helped her when she met with her

counselor. She said, "It helps with graduation because it makes you think you should start sooner, like as a 7th grader about percentages for like your GPA."

The participant explained that she studied these concepts in AVID class but that the game follows up and provides reminders about the vocabulary. She recommends this game to other students because, she said, "If they start now then they won't be blind-sided when they (counselors) start talking to them about credits." She also recommends parents to play the game because it will be "comforting for them to know what's coming and to know that their child is already studying it." She ended our interview with a huge smile while saying that she likes to tell her teacher, "I won the game!"

Samantha was a female 8th grade student and the last participant interviewed from the Non-Title I middle school. She was not aware that the researcher is the creator of the game. When asked about her experience with the game, she expressed the opinion that the game taught her a lot about college that she didn't know. She explained that the AVID students play the game during free time with their friends, and that they earn scholarships. She began to chuckle as she expressed that she always had to do the exercises. (Players are required to do exercises when they answer questions incorrectly on certain game cards.) I asked her if she has fun when she has to do exercises, and she said she does. She proceeded to explain that her "friend thought that a grant was when you borrow money and a loan was when you get money, but I told her it was the other way around." Based on the smile and upright posture of the participant, she appeared to be proud of the fact that she had learned the difference between a grant and a loan and was able to help her friend by correcting her. Her facial expression indicated pride with as her eyebrows lifted high and smiled. She went on to explain that she learned that weight for honors classes is good and that college is very expensive. She also said that she played the game

app with her mother on her mother's iPhone but that she has not played the Spanish version. She said she and her mother enjoyed competing against each other during the game because each of them wanted to be the first to graduate at the end of the game.

The participant's favorite parts of the game were the colors and the sounds. She said that she told her mother to turn up the phone when she got an answer correct and to turn off the phone when she got an answer wrong. She sometimes preferred the board game because she said it has more of the color green in it. When I asked her why she liked the color green, she said she just likes that color. She gave no particular reason even when the researcher continued to ask her to elaborate.

When asked if she would change anything about the game she stated that she would add more running exercises. She said that was fun. Again, here is another participant that enjoys the fact that some of the game questions require exercise.

When the participant met with her counselor during the school year, she said that her counselor tried to convince her to take Pre-AP classes, but the game helped her know the meaning of Pre-AP. She said, "I also learned things like GPA, Bachelor's and like Community College."

The participant said she would recommend the game be played by other students because it will help them understand about college grants and loans. She chuckled and followed up by stating that parents might not know some things either, so the game can help them, saying, "Like my dad thought a grant was when you ask for money; well you do ask but it's not free money."

My next interviews were conducted at Campus #3, which was a Title I middle school.

Jonah was a male 8th grader. He was not aware that the researcher is the creator of the game.

This middle school campus differs vastly from the Non-Title I middle school. The school is

located in a lower income area of the city. The school building is approximately 50 years old. A majority of the students come from lower socio-economic backgrounds. Jonah was the first participant interviewed at this school. This AVID classroom was similar to the other AVID classrooms from the other campuses. The walls were decorated with student-created college pennants and AVID related posters. The teacher was absent on the day the interviews were conducted, so there was only a substitute teacher in the classroom. The teacher left the list of students to be interviewed with the substitute. The classroom setting included six groups of four desks with the desks facing each other in each group. I was able to interview each student in the office area of the classroom. The participants from this school are very shy. Each response from the students was much shorter than the responses from the participants in the previous two schools. This lack of response may be attributable to the teacher's absence; students may have on their best behavior because they were not familiar with me or the substitute. Their unresponsiveness might also be attributed to the fact that these students come from different demographics and have different home lives. Further research is recommended to include additional participants from other Title I middle schools.

Jonah initially seemed shy, explaining that he class played the game in a group and that class members pick one person to pass out the money. When the researcher inquired whether her class played the board or app version of the game, he said the class played only the board game. The participant's raised eyebrows indicated that, perhaps, he was not aware that an app version of the game existed. He said that the best thing about the game is the vocabulary and the scholarships. When asked to elaborate, he said, "We pick up a card and get this much money or that much money or scholarships."

The participant indicated that he "really doesn't talk to her counselor." He said, "They give us a slideshow. The game somewhat helped with vocabulary, like to plan for college and search for how many years we need to go to college and things like that."

When I asked about preparing for graduation, the participant stated that the game helped because of the vocabulary. His only elaboration was saying that "if someone asks you about college you'll know off the top."

When asked how he would improve the game, the participant stated that he would increase the amount of words that the game has on the cards. This indicated that his impression was that the primary focus of the game is vocabulary.

His answers were short, and he ended the interview by recommending the game to parents, saying, "They could understand what their child needs to do in order to get ready for college."

Prissy was a female 8th grader from the same Title I middle school as the previous participant. She was not aware that the researcher is the creator of the game. This participant began by stating that the game gets "frustrating" because she was in debt a lot. Players go into debt during game-play when they answer game questions incorrectly. She chuckled when she reflected about her experience. She said, "I usually don't like board games but this one's fun even though it gets frustrating." When asked to elaborate, she explained that her frustration came from having to learn different vocabulary like GPA, grade point average, and college credits. It is important to note that she said she doubted she would have known the words if she had not played the game. She smiled when she said her favorite part of the game is "When you skip PE and you have to do jumping jacks! That gets you in motion!"

The participant stated that the game play helped her hold better conversations with her counselor and it helped her with graduation because she learned that she can choose higher level classes now, saying "I can take college classes in high school and then I don't have to take them in college."

When asked if she would change anything about the game, she said she would "make it to where you don't have to lose as much money or scholarships when you get an answer wrong."

She recommends the game to parents because, if they have not gone to college, then they "could learn some things to help their kid go to college, and it could also help the parents think about going to college too."

Noey was a male 8th grader from the same Title I middle school as the previous participant. He was not aware that the researcher is the creator of the game. His opening description of the game was that it is competitive and scary. When asked why it was scary the participant stood up from his chair, opened his arms above his head and loudly whispered, "Cause I want to win!" He said that his class played the board game with five students in each group. He expressed that he has learned about GPA, SAT, ACT and he restated grade point average. His favorite part of the game is, "When I skipped PE class and had to do the push-ups. It helped me exercise." He said also indicated he liked the little characters because "they are not just one color. I can relate to them." He recommends the game to be played by other students because "it's challenging." He also recommends that parents play the game because they might learn some words if they did not go to college.

When asked if he would change anything about the game he stated that he would make the game longer. He did not elaborate when asked.

My last interviews occurred at Campus #4, which was a Title I high school. Brenda was a female student who graduated in June 2017. The high school building is over fifty years old and enrolls a wide range of students, from those who live in affluent neighborhoods to those who live in low-income housing. The participant was aware that the researcher is the creator of the game. I had hoped that her status as graduate rather than a currently enrolled student encouraged the participant to be more relaxed, open, and honest in her interview. The AVID classroom was similar to the other AVID classrooms in that it had the AVID logo and college pennants posted throughout the room. The only difference was that this had the poster of *Costas Level of Thinking* more visible with student-created products. *Costas Level of Thinking* is an initiative promoted by the AVID program that supports high level thinking for students so that they can better prepare for more rigorous college level learning. This kind of thinking is another skill that AVID promotes because it supports a college-going culture.

Brenda began her first response to the interview by stating that her class used the game as a *group-builder activity*. She said they learned about Associate's and Bachelor's degrees. She also stated that the game gave her a "visual to help her learn steps for college." In addition, "The vocabulary is what really sticks out in my mind and it was good to be prepared with extra scholarships in case I had to lose some money."

She explained that her favorite part of the game was that it sparked conversations, "It sparked conversations in our group about our plans for college." The participant referred quite frequently to the conversations that were "sparked" during game play. She also mentioned liking the bright green colors of the game. She was asked to elaborate. She reached to her eyeglasses and lifted them up towards her eyes saying, "Green reminds me of growth or success!"

When the participant was asked about discussions with her counselor, she responded that she learned new definitions by playing the game, so it was easier for her to talk to her counselor by stating, "I hadn't thought about scholarships until I started playing the game. Then I realized how expensive college is!"

The participant recommended the game to other students to "identify problems early about going to college so that they will have more time to work toward college." She added that parents who do not have experience going to college can learn from the game. She said she wished she had played the game with her grandmother. I asked her if she lives with her grandmother and she confirmed she did.

When the participant was asked what she would change about the game, she restated he importance of the conversations that are sparked by the game. She said she would add more players because it would add more experiences that could be shared in more conversations.

Glenda was a female student who recently graduated from the same Title I high school in June 2017 as the previous participant. She was aware that the researcher is the creator of the game, and the researcher assured her that open and honest responses would be most helpful. The participant only played the board game version of the game. She opened the interview by saying the game was fun. She said her friends would "hold each other accountable by recording them with their phones." She said it would get "really intense." She expressed that doing jumping jacks were especially fun. She admitted to using the Lingo Sheet often to assist her with answering the questions. The Lingo Sheet is a sheet provided in the game that defines most of the college ready vocabulary presented during game-play. It is used to assist players who do not know the meanings of some of the vocabulary in the question-cards. She said she learned test

names like ACT and SAT. She also learned that students get denied academic credit towards graduation when they have too many absences or they do not get to graduate.

Her favorite part of the game was that it had different colored characters; she noted, "We always picked the one that looked like us. It also reminds me of Monopoly."

She said the game helped her when she met with her counselor because she knew that if she took the higher-level classes she could earn more scholarships. She recommended the game to others because she believed, "They will learn about real life instances and it will help them expect some things their Senior year." She also responded, "Parents may have not graduated from high school, so they may not be involved with their kids; the game could give them insight."

Emerging Themes

The remainder of Chapter IV will provide answers to the research questions and reveal the consistent patterns of themes, categories, and subcategories that guided this study. The information creates a better understanding of the experiences of the participants as they played *College Ready-the Game*.

The data includes fourteen respondent interviews, six from high school AVID classrooms and eight from middle school AVID classrooms. Three of the AVID classrooms were from Title I campuses and one of the AVID classrooms was from a Non-Title I campus. Interviews and observations produced 837 data units derived from transcription notes, observations, and audio recordings. All data units have been sorted coded into categories and sub-categories, identifying the number of units of data from the four different campuses. Special notation was given to those responses from participants that were aware that the researcher is the creator of *College Ready-the Game*. Table 3 lists the categories and sub-categories determined by the In vivo

coding. The 837 individual data units of the coding were numbered. The numbers that relate to participants' comments are shown in parentheses in the discussion of the six themes in this chapter.

Table 3

Categories and Sub-Categories of the Study

Categories and Sub-Categories

- 1. High School Fun
 - Team-Building
- 2. Challenging
 - Competitive
 - Repetitive
- 3. College
 - College-going culture
- 4. Ivy Leagues
 - Dartmouth, Cornell, Yale, Harvard
- 5. Middle School Fun
 - Small groups
 - Game app
- 6. Learning and challenging
 - Competition
 - Repetition
- 7. Familiarity
 - Monopoly
 - Childhood games
- 8. Characters
 - Diverse
 - Relatable
- 9. Sounds
 - Correct answer cha-ching
 - Wrong answer buzz
- 10. Colors
 - Green
 - Growth
 - Money
- 11. Dice
 - Familiar
- 12. Lingo Sheet
 - Resource
- 13. Exercises

- Jumping-jacks
- Running in place
- Push-ups
- 14. Vocabulary
 - Degree
 - PSAT/SAT/ACT
 - Bachelor's, Associate's
 - PreAP/AP
 - GPA
 - Class rank
 - Tuition
 - Dual Credit
- 15. Time Management
 - Planning
- 16. Financial Management
 - FAFSA
 - Costs
 - Fees
 - Dorms
 - Books
 - Tests
- 17. Make it Longer
 - More questions
 - More rounds
- 18. Add more Exercises
 - More movement
- 19. Add more Scholarships
 - Money
- 20. Spanish
 - Lack of data
- 21. Collaboration
 - Conversations
 - Teachers
 - AVID peers
 - Game-play
- 22. Counselor Meetings
 - Registration
 - College plans
- 23. Recommendations
 - Friends
 - Parents

After segregating data cards into like categories and sub-categories, six themes emerged.

Table 4

Identified Themes of the Study

Themes	
Theme I.	Research Question 1- Initial reflections of high school AVID students
Theme II.	Research Question 2- Initial reflections of middle school AVID students
Theme III.	Research Question 3- Perspectives of game features
Theme IV.	Research Question 4- Perspectives of college readiness terminology
Theme V.	Research Question 5- Recommendations for game revisions
Theme VI.	Research Question 6- Collaboration with teachers, AVID peers and counselors

The process of comparative data analysis was used in this study after data were collected from interviews of fourteen AVID students. Member checking was conducted. Member checking is an approach in which the researcher takes summaries of the findings back to the participants and asks them to confirm accuracy (Creswell, 2011).

Table 5 outlines the data units by theme and category and by which campus the data were collected.

<u>Table 5</u>

Data Units by Theme and Campus

Theme C	ampus #1	Campus #2	Campus #3	Campus #4
Research Question 1	86	0	0	47
1. High School Fun	21	0	0	13
2. Team Building	20	0	0	11
3. Learn through Challenge	e 19	0	0	9
4. College	17	0	0	8
5. Ivy League	9	0	0	6
Research Question 2	0	41	39	0
1. Middle School Fun	0	18	22	0
2. Learn through Challenge	e 0	23	17	0
Research Question 3	104	103	98	62
 Familiarity 	29	24	22	16
2. Characters	27	29	29	17
3. Sounds	23	28	26	14
4. Colors	25	22	21	15
5. Dice	7	9	11	5
6. Lingo Sheet	6	5	4	3
7. Exercises	9	11	12	6
Research Question 4	168	149	123	103
 Vocabulary 	98	84	79	66
2. Time Management/Plans	ning 34	32	28	17
3. Financial Management	36	33	16	20
Research Question 5	37	28	21	23
 Make it Longer 	9	6	3	8
2. Add More Exercises	12	9	5	6
3. Add More Scholarships	11	9	4	7
4. Spanish Version	5	4	4	2
Research Question 6	63	41	36	34
1. Collaboration	23	18	16	15
2. Counselor Meetings	18	10	11	6
3. Recommendations	22	13	9	13
Total Units	458	362	317	269

Theme One: The Initial Reflections of High School Avid Students That Played College Ready-The Game

High School Fun While interviewing the high school respondents, the distinct difference in maturity level between them and the middle school respondents was evident. High school students were each articulate and confident and were not in a rush to answer the interview questions. When asked about their experiences of playing the game, their answers were reflective, and they gave much thought to their responses. All high school students entered their classroom as if it was their home away from home because they demonstrated a high degree of comfort. They were laughing, smiling, and walking into their classrooms without any hesitation. Three of the participants had coincidently worn an AVID t-shirt, which indicated pride in their program. The camaraderie and light-hearted fun that permeated among of all the students was contagious. The word "fun" was used quite often at the beginning of each interview. Norma made reference to playing the board game when he went to his feeder middle school AVID class last year (13). He said that it was fun when he played it in middle school, so he was excited when he saw that his high school teacher was going to include the game in her class (17). Brenda expressed, "It was fun playing in our class" (101). Glenda enjoyed playing as a class, stating, "We have so much fun with it during *Team-Building Thursdays*" (446). Brenda called their time, "Group-Building Thursdays" (385). According to Norma, "Our teacher projects the board up on the big screen and we get into teams" (3). The participants from Campus #1 also stated they would name their teams. Norma said their team was named, "The Drop-Outs" (6). Eric said that his class has fun by playing in small groups and each group selects a person to distribute the scholarships (393). He said they rotate the groups so that all the students get to know each other (139). "We play it over and over but it's fun" (44).

Challenging. The high school students also enjoyed the *competition* that the game evoked during game play. The game challenged them to learn and compete. Michael said, "It's competitive against our classmates so I tried harder" (67). Or, as Adam explained that some of their friends would hold them accountable by recording them with their phones when they would answer a question from one of the cards (432). One of the high school respondents said the money makes the game real intense (397). "I know AVID would've taught me some of these words, but the game is in a competitive environment, so I try harder to learn it" (98). She said their class gets into teams and compete against each other to become the first to graduate high school or to earn the most scholarships (413), commenting, "The class gets divided into two large groups and each person takes turns reading aloud the question card to the class" (407). She explained that the team members raise their hands as quickly as possible when they are ready to answer for their team (409). The response by Brenda indicated that rich conversations were sparked by playing the game in a team or group building type of setting (97, 98). "We each wanted to win and say our plans for college" (398). The game gave the students an incentive to learn (99). The participants welcomed the challenge.

College. The high school students appeared to understand that they are in a college-going culture every day in their AVID classroom because their discussions revolved around skills such as WICOR (Writing, Inquiry, Collaboration, Organization, Reading) that prepared them for college (726). *College* was obviously a topic of the discussions in their AVID classroom and during the game-play of *College Ready-the Game*. A general impression that the high school participants expressed about playing the game was that it "opened their eyes" to college as Michael stated (13). Brenda said, "I hadn't thought about college or scholarships until I started playing the game" (410). It was rewarding to hear the participants elaborate on perceptions they

had about their experience. For example, "It gave me a visual aid to help learn steps I needed to apply for college" (389). Another comment was, "Like paying for college and what I need to do to get scholarships" (391). Glenda thought it was a good way to prepare them because it taught them that the "higher your grades the more scholarships you got in the game, which is just like college" (450). They were not aware that college was so expensive (411). The high school participants were quickly developing a vision of their college future that included thoughts of paying for college. For example, Noah stated, "Now I'm thinking about the financials for college" (51). Brenda was the most explicit about the fact that "conversations about our plans for college or preparing for college happened a lot, I mean a lot" (399). "The conversations about college influenced others to start thinking about college" (428).

Ivy Leagues. When the high school participants described their experiences of playing *College Ready-the Game* in their AVID class, the topic of Ivy League schools and the importance of knowing which schools are Ivy League was prevalent in their responses. This is significant because it indicates that AVID students have aspirations of attending or applying to Ivy League schools. As Norma stated, "I was missing Dartmouth and Cornell when I was playing the game and was asked to list the Ivy Leagues schools" (9) and "I only knew the popular Ivy League like Yale and Harvard, but I did not know about Dartmouth, Cornell, and Brown" (7). Vanessa took pride in listing all of the ones she knew: "Like I know Harvard, Yale, Cornell, Brown, and I know there are more" (236). Two of the participants named every one of the Ivy League schools without any assistance (565), as one boasted, "I can name all eight of the Ivy League schools" (569).

Theme Two: The Initial Reflections of Middle School Avid Students That Played College Ready-The Game Middle school fun. All of the middle school participants explained that they play the board game version of the game. Prissy stated, "We play the board game. I usually don't like board games but this one's fun" (343). Vanessa said, "We get into small groups and play the board game. It's fun and it helps us" (254). They take turns reading aloud the questions on the cards in the board game (257). Zach said, "We have fun every time we play" (224). Noah states that most games can be boring but this game is fun (228). Samantha plays the game app version of the game with her mother (296). She expressed that she enjoys playing with her mother. She said, "We play every Saturday and more of my family want to play it now because I talk about the game a lot" (299). The teacher at Campus #2 recommended to her students to download the app on their own iPhones, however most of the students had not taken the initiative to download the app on their own (512).

Challenging. While the middle school participants indicated the game is fun, they also noted that it is competitive and challenging: "The game is challenging" (227). One student said, "It got me thinking about *later* instead of just about *now*" (219). I learned a lot because it tied questions into college facts. One way that middle school students define *competitive* is by stating that it's scary and intense (366). Noey expressed that he gets scared when he plays because he wants to win every time (361). He indicated that the competition is so fierce that he uses the Lingo Sheet whenever he does not know an answer (363). Through the use of the Lingo Sheet the students were challenged to learn or memorize the college ready terms on the Lingo Sheet. Samantha likes to be the first to tell her teacher when her team wins (275). And Rudy said, "I like to beat my friends" (148). "The best part is probably ending up with more money than my friends" (168). The word "dominance" was expressed by Noey, "I like the dominance of the game" (169). "I like to dominate" (170). Vanessa enjoys shouting, "I won the game"

(273). As the researcher, I quickly noticed that the students were learning as much about the game as possible because they were determined to win the game. The challenge for the participants was to win the game and the only way they could accomplish this was by *learning* the content of the questions each time they played.

Theme Three: The Perspectives Of The Middle And High School Avid Students In Reference To The Features Of College Ready-The Game

Familiarity. The patterns of responses to this question appear to center on what the participants considered as their favorite features of the game. Most of the high school respondents started by reflecting positively on their younger days when they were playing board games at home, noting that the game reminded them of their childhood. They mentioned the game had a "retro" (47) or "familiar" feel (49). Another participant said, "I like how the cards remind me of playing cards with friends like when we were little" (20). A game that is very familiar to the respondents is the game of *Monopoly*. There were several references to *Monopoly*. "I like how the game is like *Monopoly* since the scholarships are like money" (446). Zach said, "As soon as I saw the money, I knew it would be cool to play" (209). A respondent from Campus #4 said, "The board game has cards like *Chance* in *Monopoly*" (392). "It resembles *Monopoly* and that's my favorite game growing up" (145). They particularly like the fact that they have to earn scholarship money when they advance around the game board (320).

Characters. In addition to the familiarity of the game, the respondents also appreciate the diversity of the mini-character pawns, saying that they "felt a connection to" the game because the mini-characters resemble them (442). They appreciated the diversity of the characters (441), making comments like: "They are not just one color" (372). As Noey stated, "I like to pick the one that looks like me" (374). "The characters are very diverse" (75). They also said the

characters are different races and ethnicities (111). This was significant information for the researcher and creator of the game because of the deliberate nature in which the characters or pawns were created. They were specifically designed to depict a variety of ethnicities so that players could feel a real-life connection as they play. In the words of one of the students, "I can relate to them" (229).

Sounds. Another favorite feature of the participants were the sounds included in the game app version. "The sounds give you a boost of confidence when you get an answer correct" (50). According to Adam, "It breaks the tension either good or bad like right or wrong" (89). While one said the sounds are cool (292), another participant said the buzz that alerts when a player gets an answer wrong is "like a rude awakening" (77). Another respondent mentioned that the "cha-ching" reminds them of playing games when they were little (604). Another student stated that when she played the game with her mother, she felt happy when she heard the "cha-ching" of a correct answer, but that she told her mother to turn off the sound whenever she answers a question incorrectly (295, 613).

Colors. The color green arose a few times during the responses. The board game version does, in fact, have an abundance of the color green. When the researcher probed for elaboration, one of the high school respondents explained it best, "Green reminds me of growth or success" (404). Another respondent said the color green reminds her of money or her school colors (302). One of the middle school respondents said that she simply likes all of the bright greens (401). The general impression about the colors of the game is that they stand out (401).

Dice. The board game contains one die inside the box that the players must roll during different segments of the game. Many of the respondents expressed that they enjoyed rolling the

die (360). One of the respondents tried to educate me by saying, "Kids like playing with dice" (19). The dice also reminded them of the game of *Monopoly* (531).

Lingo Sheet. The Lingo Sheet is a list of college ready vocabulary that the players of the game can choose to use if they need assistance answering any of the game questions.

Participants said they like the Lingo Sheet because it gave them "in depth definitions" (463), and the sheet helped the words "stick in their mind" (576). Another respondent admitted to using the Lingo Sheet a lot (464): "Without the Lingo Sheet, I wouldn't have known what half of the words were. Now I know them" (721). When players use the Lingo Sheet they can earn only half of the amount of scholarships, however this did not seem to bother the participants. They said it helped them learn the vocabulary (734). Several said they repeatedly used the Lingo Sheet every time they played (669).

Exercises. It was a nice surprise to hear responses that included *exercises* as a favorite feature of the game: "I like how the game makes you get up and do jumping jacks and exercises" (245) and "I had to do push-ups because I didn't know an answer to a question, but I actually liked it" (8). One of the participants elaborated by saying that their teammates would record them with their iPhones while they were doing the jumping jacks" (434). Each of the participants chuckled as they explained about the exercises they had to conduct during game play: (709) "The game gets you into motion" (349) and "I think it's fun like when you skip a PE class you have to do jumping jacks" (246). They expressed that they liked the scenarios that referred to gym class or PE (277, 383, 384). There was chuckling when the participants reflected upon conducting exercises during parts of game-play (729). Rudy ran in place when he talked about getting a question incorrect and had to run in place (276). The participant smiled from ear to ear as he expressed his joy about including exercise as part of the game (732).

The features of the game apparently made a lasting impression on the participants and affirmed that the time it took for the creator to spend on designing the features was worthwhile. The responses were considered their favorite parts of the game.

Theme Four: The Perspectives of The Middle And High School Avid Students Regarding College Readiness Terminology While Playing College Ready-The Game

Vocabulary. There was a pattern of similar responses from both grade levels of participants. Middle and high school that indicated the students gained a bank of college knowledge or vocabulary: "The vocabulary was really what stuck out to me" (390). "What helped me the most in this game was the vocabulary" (328), and "I was learning new definitions every time" (407). Many of the respondents stated that the vocabulary was the best thing about the game (318, 555, 559, 713): "The game shows you that there are many words you need to know to prepare for college" (722). One of the respondents admitted that she didn't really pay attention to any of those types of words before she started playing the game (455). Whether they were middle or high school students, students repeated the common vocabulary words of the game in virtually every response. Several students stated that whenever they moved their game pieces back and forth, they learned the vocabulary words (268): "The term "credit denial" is important because if you don't make up credits you will not graduate" (453) and "Credit can be denied if a person has too many absences in school" (457). Another vocabulary term was the word Degree: "I learned how long it takes to get an Associate's Degree and a Bachelor's Degree when I played the game" (202). Many did not know that there were different kinds of degrees (175). Samantha said, "I know that you can get an Associate's Degree at a Community College, but I didn't know that until I played the game" (314). Another participant said she learned the number of years it takes to earn a Bachelor's Degree (136). The respondents mainly referred to

the Bachelors' and Associates' Degrees (741) while another respondent referred to the possibility of earning a Master's Degree (41). The participants also learned the meaning of many acronyms. PSAT, ACT, SAT, GPA and FAFSA were among the acronyms that were most often referenced (436, 368, 157, 155, 104, 29, 95, 239, 271). Noey elaborated a little bit about the importance of GPA (369). He said, "GPA is your grade point average and if you don't keep your GPA up you will not get into college" (366). Another participant, Noah, was proud to say she knew that SAT meant Scholastic Aptitude Test (689). As one participant expressed, "I didn't know about the tests to get into college" (104). And another respondent said, "I didn't know that your GPA could keep you out of college" (698). Adam was unaware that SAT and ACT were two different tests until he learned this information by playing the game (29, 95). Among other vocabulary terms that were learned were class rank, tuition, and FAFSA (701, 707, 709). The word "tuition" and the acronym FAFSA were terms that they referred to as they elaborated on the new vocabulary the game exposes them to(81, 82). "It opened my eyes to financials when I learned the vocabulary" (52). Jonah stated, "I now know the difference between a grant and a loan" (334). "If I get a loan then I have to pay it back" (338). Vanessa emphasized that "certain types of classes you take in high school can help you rank higher in your class" (234). Classes such as Pre-AP, AP, and Dual Credit can earn students bonus points to help them boost their class rank (591). The participants learned that Dual Credit means students can earn college credit in high school (763). The high school participants made the connection that if they take Dual Credit courses in high school then that can save them a lot in tuition costs (275). The pattern of responses about the vocabulary that the participants learned by playing the game reiterated what one of the respondents said, that they "would've learned the vocabulary in AVID class but that playing the game was a good reminder about the meaning of the vocabulary" (733).

Respondents said they learned the vocabulary by "playing" the game over and over (18, 319, 411). In the interviews about the vocabulary, the Lingo Sheet was referred to as a safety net that students use to assist them with the vocabulary (399). The significance of the Lingo Sheet is that the players are exposed to the vocabulary terms repeatedly and the participants are free to answer game questions without fear of losing scholarships. Zach said, "The game helped me know the word "Pre-AP," like I need to take Pre-AP science cause I want to be a physical therapist" (601). The pattern of responses produced several vocabulary terms that the students easily recalled. It was evident that the students had earned some college ready vocabulary. The repetition of the game play aided in the memorization or learning of the vocabulary (417).

Time Management. One of the things expressed by the participants when they referred to the college readiness terminology of the game is that the terminology taught them some steps and processes that need to occur in order for students to become college ready: "The game showed me what to expect and how to get there" (85), "Now I know what to expect" (91), "It taught me like to apply and fill out papers early" (311, 416), and "I wasn't thinking about college until I played this game" (53). Participants indicated that the game has shown them how to get there and what to strive for (57, 85). The impact of time management arose in in their responses about the processes to take to prepare for college (28): "I realize I need to stay on top of things and not slack off" (44), "College is not always going to be on top of you" (43), "I feel like the game has kind of like opened my eyes" (80), and "Now, I'm thinking about college" (83).

Participant 1.4.N. elaborated by explaining the importance of early action and due dates for important things during the college admission's process (86, 87). A middle school participant expressed that he now knows how long it takes to earn a degree so he has to start planning for those years (202). One of the participants said he is now looking into the process of getting into

a Division 1 college and that he is going to have to manage his time in athletics and in academics in order to pass (137). Another participant explained, "I can't miss school because I will get denied credit and won't get to graduate" (454). The game made the participants realize that they need to manage their time wisely: "After high school there will be ups and downs so I need to be prepared" (56), "If I don't plan ahead then I will miss out on important deadlines" (751), and "I really didn't pay attention to deadlines before that game" (455).

Financial Management. The game informed them that college is expensive (141, 84): "It opened my eyes to financials (52), "It taught me that I need to manage money" (27), "In college you won't always be given money" (142), and "Definitely the game helped me with money management" (143). Participants said they had not learned about dorms, tuition and books until they played the game (11, 42, 43). The game made them aware that there are fees and costs (271): "The game showed me that I need to save a lot or I could lose a lot" (144), "It taught me about FAFSA" (101), "I learned about FAFSA in one of the game questions" (282), and "There were some things I didn't know like to apply for financial aid before December so I can qualify for some scholarships" (103). The participants expressed that they did not know they had to apply for loans, scholarships, and grants, and they did not know that there was a difference between each (334, 142, 149): "It taught me to list Business schools in my FAFSA because they give scholarships" (23), "I learned that the PSAT and SAT can help me get scholarships" (102), and "I found out that if I pass my AP or Dual Credit tests I won't have to pay to take some classes in college" (82). These responses were good to hear because as the creator of the game, the significance of student loan debt was a lesson I wanted to create as an awareness piece for all students who play the game.

Theme Five: Recommendations For Revisions for College Ready-The Game from the Perspectives of the Avid Students

Make it longer. The majority of the respondents suggested revisions that included making the game longer (182): "If it were up to me I would make the game longer" (370). Noey said, "I would change it to add more squares around the board, so it could last longer" (369). The middle school participant Zach said, "I would add more rounds like maybe four times around for a Bachelor's Degree and two times around for an Associate's Degree" (207, 208). One of the high school participants said she'd like to make the game longer to add more experiences for conversations (399). One of the middle school participants said, "Add the *Big 12* Conferences to the game" (206). The common pattern of responses is made clear in this response by Rudy, "I would add more questions to go more rounds" (189).

Add more exercises. A distinct pattern of suggestions for game revisions arose from the responses of the middle school participants. Some suggestions included that designers could, "Add more of the questions that put you into motion, like the jumping jacks you have to do when you skip a P.E. class" (183), "I would add more work-outs" (287), and "Make the game longer by adding more exercises" (204). The participants appear to favor doing exercises throughout the game, which was indicated by respondents' smiles when the term *exercises* were mentioned. Most of them liked to do jumping jacks or run in place (288). Samantha said, "I'd add more running in place" (289). Another student suggested, "Add more exercises that they have to do when they miss a question" (296). Considering that middle school students are quite a bit more active than high school students, the researcher was not surprised to receive the pattern of responses requesting additional physical movement. The high school participants also appreciated the physical movement and exercises that are included in the game (290). Brenda

said, "I would add more players and more exercises" (395) and "Maybe you can add more running in place" (420).

Add more scholarships. Some of the respondents suggested adding more revisions that included more opportunities for scholarships or money (730): "I would add more money" (220), "Maybe they should add more scholarships" (196), "How about adding more scholarships if they get a 900 on their SAT" (532), "Don't let the players lose so much money when they get an answer wrong" (347), and "Add more scholarship questions to earn more money" (197). Based on the pattern of responses, the participants appeared to value the scholarship opportunities in the game.

Spanish version. None of the participants had played the Spanish version of the game (613). Prior to making any decisions about revisions of this portion of the game, it is important to note that the 14 participants were all predominantly fluent English speakers (529). Future research needs to be conducted with the purposeful selection of English Language Learners (ELL) or Bilingual students to determine if more use of the Spanish version of the game is of any benefit. When asked if they had played the Spanish version, all of the participants responded, "No" (35, 61, 97, 123, 154, 166, 192, 267, 306, 357, 419, 460, 610, 701).

Theme Six: The Experiences That Arise by Playing College Ready-The Game Were Conversations with Teachers, Avid Peers and Counselors

Collaboration. The respondents overwhelmingly expressed that playing *College Ready-the Game* was helpful in building their college ready vocabulary in their AVID classrooms. In addition, they stated that they would have learned the vocabulary from their AVID teachers regardless, however, the *repetition* in the game-play helped participants remember pertinent vocabulary and even reminded them about the importance of the vocabulary (727): "The more I

play the game the more I remember the answers to the questions" (333), "Our teacher gives us a college assignment and I wouldn't know what half of the words mean but because of the game I do" (71), "We talk about the college assignments in our groups" (73), and "I can now search for the right college that best fits me" (55). The *conversations* that occurred among the network of AVID classmates during game-play not only built their vocabulary but also built their *confidence* level and enhanced their networking skills with their fellow acquaintances or peers (579): "The game started a lot of conversations" (430), "The cards sparked conversations about our plans for college" (403), and "We had a lot of conversations; I mean a lot" (400). Brenda said, "The conversations came from the game cards and they influenced us to plan ahead" (428, 429).

Norma explained that students started searching for colleges to attend and what they needed to apply (633): "After the game we started to talk about college and search for how many years we need to go to college and things like that" (331). The responses indicate that the students had built some social and cultural capital because the topic of *college* is evident in the conversations that occurred in their AVID classrooms.

Counselor meetings. Counselor meetings are key opportunities for students to have input into their future classes and college aspirations. Based on the following responses, it appears that the students were able to produce well thought-out questions or instructions for their counselors: "I asked my counselor to help me look into Ivy League schools" (22), "My counselor advised me to take Pre-AP, but now that I've played the game I go more in depth about why I should take Pre-AP classes" (113), and "Like next year, I am already registered for Pre-AP classes" (115). Another participant said, "I don't just choose my favorite subjects; now I know what subjects I need to ask my counselor for" (148). The participants learned that if they take higher classes it will boost their GPA and class rank (150). Rudy said, "I talked to my

counselor about taking classes that could get my ranking up so that I could get into college" (188). Others commented, "I asked my counselor what classes I could take now instead of later when I'm in college" (213), "I learned that weight is good, so I sign up for classes that are weighted" (283) "My counselor used to try to convince me to take Pre-AP classes, but I wouldn't listen until I started playing the game" (297), and "I get it now" (299). Prissy said, "Now I know what I can choose" (353). Middle school responses were similar to high school responses: "I like going through the cards because you repeat the questions and know it when our counselor meets with us" (375), "It was easier for me to talk to my counselor because I knew the definitions of the words she was talking about" (408), and "Like when she'd tell me to take Dual Credit classes; I knew what she was talking about and I knew why" (409, 417). The students ultimately developed the confidence to navigate conversations with their counselors and teacher because the conversations they held during game-play made the use of college ready vocabulary a naturally occurring practice.

Recommendations. The participants recognized the benefits of the game because they all responded that they would recommend it to their *friends* (772). Michael said, "I'd recommend it to my friends because it's a fun game that might change their life" (61), "It will expand their knowledge from what they know now" (62). Norma wants to recommend the game to the Junior tennis team and to her little cousins (32, 33). Rudy said his friends could learn a lot more about college like the vocabulary and the degrees (192). Another participant expressed that her friends needed to start playing the game sooner like in 7th grade so they can be ready (257): "If they start now they won't be blind-sided when they start talking to them about credits" (264). The participants responded with confidence about the recommendations they would give to their peers. Adam said that the game would especially help people who don't have parents that went

to college (90). It was evident that the participants had developed some college knowledge, or some capital, based on the college ready vocabulary they articulated in their recommendations.

In addition to recommending the game to their friends, the participants stated they would recommend the game to parents. Prissy stated, "It's hard for parents to know about college if they haven't gone to college" (64). Other comments included "Parents can play the game with their kids and learn with them at the same time" (36), "If they're not financially able to take their child to visit colleges, they can play the game with them and learn about college with them" (37), and "Instead of just the kid learning the information, the parents can learn too" (124). Some of the respondents indicated that parents can guide their children to learn the process of going to college when they play the game (93, 125). Norma recommended parents to play the game with their little kids now so they can get them to start thinking ahead for college (222). One of the participants also felt that the game could help the parents bond with their son or daughter (66). Participant 2.5.N. mentioned that she plays the game app with her mother on her iPhone (285): "It makes me happy when I get an answer right" (294). During conversations with their parents, the participants said they discuss financial options for college (509): "My dad and I played the game and he thought a grant is something you have to pay back" (309), and I helped my dad understand what grants and loans are" (305, 308). Participant 3.1.N. said parents should play the game so "they could understand what their child needs to do in order to get ready for college so they can help them" (339). Many students attested to the importance of parents playing the game: "Parents can even start thinking about going to college too" (359), "It could give them insight that grants are free" (463), and "My mom and I know now that grants are free money for people who have a good class rank" (310). With the participants' increased understanding of college ready vocabulary, they were able to articulate the importance of holding informed conversations with their counselors and recommend the value of the game to their parents and friends.

Based on the responses of the participants it is evident that the opportunities of game-play in the college-going culture of their AVID classroom have earned the students the verbal facility to hold meaningful conversations with their counselors and make thought provoking recommendations to their parents and peers. *College* has become a part of their culture through their conversations during game-play and through the actions that occur based on the decisions that are made from the conversations. None of these conversations can occur without developing a college ready vocabulary.

Chapter IV Summary

The purpose of the study was to discover, through qualitative inquiry, the experiences of the AVID participants after their teachers implemented the game, and to discover if those experiences facilitated the development of college ready vocabulary. In addition, the results of the research will be used to guide improvements to the game and make recommendations to AVID teachers and school principals for implementing the game in their classroom and schools. Each respondent shared his or her experiences of the game; in virtually all cases, the patterns of responses were consistent. As part of a naturalistic inquiry, each participant was introduced with descriptive details about the context of the classroom setting in which each interviewed occurred. Because the participants are AVID students, the researcher felt it important to conduct the interviews in an AVID classroom setting that was the natural, daily setting for the game-play experiences. Sixty-five percent of the participants were from Title I schools and 72% of the participants were unaware that the researcher created the game. The majority of participants

found it easy to play the game. Although some respondents were in middle school and some were in high school, the patterns and themes of the responses that emerged were similar.

Chapter V

CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

The previous chapters include the introduction, statement of the problem, purpose of the study, significance of the study, literature review, theoretical framework, methodology and procedures used in the study, and the presentation of the data and findings answering each research question. Chapter V presents a summary of the study, conclusions drawn from the results, and a discussion of the implications of the results. Recommendations for game creators and for AVID teachers and school principals conclude the chapter.

Summary

School principals are WAY too busy to read an entire dissertation. I know! I am one of those principals! However, I hope that some will take a few minutes to sift through this study and see themselves in me. I believe that principals can transform the world with their ingenuity and wealth of experience! We just don't seem to have the time to bring our brilliant ideas to fruition. Standard 3 on the Texas Principal Evaluation & Support System (T-PESS) evaluation instrument states that principals will model personal responsibility and a *relentless* focus on improving student outcomes. Principals receive mandates and expectations from many different entities; however, we are left to our own devices to meet those expectations.

As a high school principal, my moral compass is a daily reminder of the hurdles I faced as a Latina and first-generation college student. After twenty years in education, I took a moment to reflect on a problem that is still occurring in our schools. I discovered that after all these years, students who have a similar home life as I did are still lagging behind with reference to college admissions. I saw this problem and was eager to solve it. After searching countless

hours for a college ready resource to help my students, I could not find one. So, I looked in the mirror and decided to create one on my own. I created *College Ready-the Game*. After all, we principals are supposed to be *relentless*!

According to Glesne (2011), Action Research is a method used to improve practice and become an *agent of change*; therefore, I chose to utilize tenets of Action Research to discover the experiences of students who played *College Ready-the Game*. I, as the researcher, was the primary instrument for data collection. I believe this was important because my goal is to reflect and take action based on the results that are revealed. Data were collected and interpreted. Consistent patterns of experiences were analyzed during the reflection phase. It was imperative to gain insight into different perspectives by interviewing participants from diverse socioeconomic backgrounds, such as students from Title I schools and Non-Title I schools and students from two different grade levels such as middle and high school.

The sample of participants consisted of fourteen AVID students from four different schools from an urban South Texas school district. The AVID teachers that were selected have ordered the majority of inventory of board games and have implemented the game regularly in their classrooms for a minimum of one semester. I invited the teachers to randomly select five students from each of their classes. On the day of the interviews, only the students who had submitted the Parent Consent form were interviewed. Two of the students were absent, so the total number of students was fourteen. The following criteria were utilized: two middle schools and two high schools; three were Title I schools, and one was a Non-Title I school. The schools in this sample were ideal examples of socioeconomically diverse schools. The schools are located in four different sections of the city and the school populations are comprised of general education students, special education students, and English language learners.

Interviews and observations were used to gather information from the participants. The human instrument was the primary instrument of the study for data collection purposes.

Erlandson et al. (1993) recommend, "Purposive sampling through human instrumentation increases the range of data exposed and maximizes the researcher's ability to identify emerging themes" (p. 82).

Data collected (interviews, observations) in this study were subjected to qualitative analyses. Each respondent was asked eleven open-ended questions. I, as the researcher, recorded the interviews using an audio recorder to thoroughly capture and document the entire response of each interview. The analyses of the consistent patterns of emerging themes provided connections to the process that occurs when students are immersed in college ready vocabulary. The results also provided suggestions for future study and recommendations for AVID teachers, principals, and game creators.

Findings

The consistent findings of emergent patterns conclude that the experience of playing College Ready-the Game enriches the college-going culture of the participants in the AVID classrooms, and the students learn by doing. The predominant setting that the high school AVID teachers use to implement the game is by projecting the graphic of the board game app onto a large white screen in the front of the classroom. Students are divided into teams and compete against each other. The middle school campuses play in small groups or teams with the board game version of the game. Team-building opportunities were evident as indicated by one student's statement, "We had so much fun with it during Team Building Thursdays" (446). The patterns of responses indicate that while College Ready-the Game was created as a tool to instill

learning, it was also fun. The team building that occurred is strong evidence that a *community of inquiry* was established when students played *College Ready-the Game* together.

The high school students enjoyed being *challenged* while playing the game. The competitive nature of the game inspired them to compete to win. They understood that in order to win they would have to master the answers to the questions posed in the game, as indicated by these statements: "I know AVID would've taught me some of these words, but I like beating my friends, so I try harder to learn it" (96) and "We wanted to win and *say* our plans for college" (398).

By incorporating the game weekly, such as during Team-building Thursdays and Group-building Fridays, the participants were repeatedly exposed to the college ready vocabulary in the game. The game-play was competitive and repetitive.

The high school participants were part of a college-going culture in their AVID classroom. The word *college* was spoken by each participant and was clearly expressed in their reflections of playing *College Ready-the Game*. Note the following reflections:

- "The *conversations* we had with each other influenced us to start thinking about college" (428).
- "It opened my eyes to college" (13).

While it was evident that the AVID classrooms held discussions about *college*, *College*Ready-the Game provides additional opportunities to "spark" conversations about college.

Through AVID activities and the game activities, the high school students created a collegegoing culture among their groups and teams. Additionally, college became a part of their
language through game-play. The culture created a community of inquiry (Bruce & Bloch, 2013)
due to the conversations that occurred.

The topic of Ivy League schools was prevalent among the responses from the high school participants. According to the respondents, it was not a topic they were aware of prior to playing the game as indicated in the following reflections:

- "I found out about Ivy Leagues" (16).
- "I found out I can get a scholarship to an Ivy League school if I score high on my SAT" (96).

There is ample evidence to conclude the high school participants are now confidently open to participating in discussions that include the topic of Ivy League schools. There was no hesitation in their responses when they proudly listed the eight Ivy League schools as something they learned by playing *College Ready-the Game*.

Similar to the high school responses, the middle school participants included the word *fun* in their initial reflections. All middle school respondents at the Non-Title-I campus said they mainly experienced playing the board game version of the game, however their teacher had informed them about the app version of the game. Two of the participants from that campus had downloaded the game app onto their iPhones and one of the two had also downloaded the game on her mother's iPhone. Note that these participants are from a Non-Title I school, so their parents are presumably more financially able to purchase iPhones. The initial reflections of the middle school participants were:

• "My mom and I have fun playing every Saturday and more of my family want to play it now because I talk about the game a lot" (299).

Based on the pattern of responses, the middle school students appreciate competing and being *challenged* just as much as the high school students. They thrive for competition and are

determined to win as noted in the following response, "I want to be the first to tell my teacher I graduated" (275).

When the participants were asked about the features of the game, they tended to reflect on their favorite parts of the game. Both grade levels, middle and high school, noticed a *familiar* feel or connection to the game. As one student stated, "I like how the cards remind me of playing games with my friends when we were little" (20).

After the respondents expressed the *familiar* feel of the game, they shared reflections about the distinct characters that are in the game. One of the most surprising features that the participants expressed appreciation for was the diversity of the mini-characters. This was a welcome surprise because I was purposeful in the design of the characters. The diversity of the characters was key to the design because I wanted students to feel a personal connection to the game. It was fulfilling to listen to the responses such as:

- "They are not just one color" (372).
- "I like to pick the one that looks like me" (374).

Similar to the manner in which music can create a feeling, so can *sounds*. Sounds were a favorite feature of the game as expressed in the following response: "The sounds give you a boost of confidence when you get an answer correct" (50). One of the middle school participants said that the cha-ching that sounds off when a player answers a question correctly reminded her of a game she played when she was younger (604).

The colors of the game were also noticeable to the participants. The colors were powerful enough to convey a message to many of the participants. They definitely like the color green. They believe green reminds them of growth, money or success. As the designer of the game, I was deliberate in choosing the color green as the primary color; however, my purpose for

the choice of green was to create a familiar connection to green, plaid, prep-school uniforms that are often depicted in movies. Based on the reflections, it is evident that the participants appreciated the choice of colors for the design of the game.

A feature that is included in the game is the *dice*. Most traditional board games such as *Monopoly* have dice that are required as part of their game. I deliberately added a die to the game so that students who play the game will have an instant connection to board games they may be familiar with from their childhood. This action proved to be beneficial because as one respondent explained, "Kids like playing with dice" (19). Several of the respondents said that dice reminds them of *Monopoly* (531).

Another component of the game is the *Lingo Sheet*. The Lingo Sheet was included in the game so that players could have a handy resource to refer to if they struggled to answer game questions. The resource is intended to provide definitions for college ready terms and act as a visual aid to assist players to memorize and learn the vocabulary. As one of the respondents said, "The sheet helped the words stick in my mind" (576). And, another participant stated, "Without the Lingo Sheet I wouldn't have known what half of the words were. Now I know them" (721) and "I used the Lingo Sheet every time I played" (669). The patterns of responses indicate that the *Lingo Sheet* does in fact serve as a handy resource that players can use repeatedly.

The most surprising response to research question number three was the word, *exercises*. I had added *exercises* as a requirement in some of the game questions after the first version of the game was created. *Exercises* were added to provide opportunities for players to reenergize themselves because most board games require people to stay in a sedentary position for hours at a time. I was pleasantly surprised to hear their appreciation of the opportunities to exercise

during game-play. More importantly, the actions of the exercises helped them remember the answer to the question they missed, which in turn helped them learn the information that the game questions posed. As one participant stated, "I had to run in place, but I learned what GPA means" (501).

All participants responded to the interview questions by stating that one of the main things they learned while playing the board game was the college-ready vocabulary. When I asked the participants to elaborate about the vocabulary they had learned, the vocabulary words that were repeatedly mentioned were: Bachelor's, Associate's, GPA, Class Rank, FAFSA, ACT, SAT, PSAT, Ivy Leagues, AP, Dual Credit, Pre-AP, Tuition, Weight, Grants and Credit Denial, and Degrees. The most commonly repeated responses included these specific vocabulary terms, which indicates that the terms were significant to the respondents.

Students also made connections to their own lives with the new vocabulary as reflected in the following statement, "The game helped me know the *word* Pre-AP, like I need to take Pre-AP Science because I want to be a physical therapist" (601).

Time management was a category of learning that arose from the patterns of responses. As a school principal and the creator of the game I intentionally developed questions that would convey the importance of planning ahead, a trait that I believe enables them to successfully navigate the college admissions system. Questions were included in the game cards to direct attention to the significance of meeting deadlines. The participants clearly expressed they learned the importance of time management. Some examples of the responses include:

- "College is not always going to stay on top of you" (43).
- "Now, I'm thinking about college" (83).
- "It taught me to apply and like fill out papers early" (311, 416).

Reflecting on my experience as a first-generation college student, I recognize and remember the financial barriers that students face. Student loan debt and college expenses often are not realized until after college students have incurred large amounts of debt. It was imperative for me to include questions in *College Ready-the Game* that would draw attention to this potential pitfall for students. I was relieved to hear the patterns of responses that mentioned references to financial management. The participants learned about tuition, fees, dorms, FAFSA, early action for scholarships, loans, grants, and more.

The second part of each interview asked for recommendations for revisions to the game. As the game creator, listening to the participants say that they want to *have more* of a game that I created is a rewarding feeling and a welcome surprise. I anticipated hearing suggestions that included "delete this or delete that," but I did not. The pattern of responses included suggestions on how to *make it longer*, including suggestions for adding *more exercises* and *more scholarships*. A very clever response was from a high school respondent who recommended I make the game go four rounds for a bachelor's degree and two rounds for an associate's degree. They also want to add more cards to spark more *conversations*. Notice that participants used the following words in many of their responses: *conversations*, *questions*, *say*, *vocabulary*, *words*, *college*. I will refer back to this as I conclude this chapter.

I was curious about the Spanish version of the game; however, due to the fact that none of the participants played the Spanish version of the game, there was insufficient data to provide an analysis of experiences that included playing the game in Spanish.

It is evident that the AVID students regularly engaged in *conversations* with their peers when playing *College Ready-the Game*. Team Building and Group Building Thursdays were also quite popular and were part of their classroom culture. The game prompted the students to

talk to each other about their college plans. They engaged in "college talk." For example, "After the game we started to talk about college and search for how many years we need to go to college and things like that" (331).

The other types of *conversations* that the students experienced occurred during the meetings with their counselors. These meetings are significant because key decisions are made about the educational future of the students. It is important to realize that in order for the students to participate in thoughtful and knowledgeable conversations, they must first understand the *language* that the counselor is speaking. *Language* is made up of *words*. Conversations during these meetings must be two-way communication to enable the students to have a voice in the decision-making process about the choices they are expected to make about their educational path. According to the responses of the participants, they acquired knowledge and college ready vocabulary as a result of the opportunities they experienced through playing *College Ready-the Game*. The following responses are examples of the *dialogue* the students had during their *counselor meetings:*

- "I asked my counselor to help me look into Ivy League schools" (22).
- "I don't just choose my favorite subjects; now I know what subjects I need to ask my counselor for" (148).
- "I learned that weight is good so I sign up for classes that are weighted"
 (283).
- "Like when she'd tell me to take Dual Credit classes; I knew what she was talking about" (409).

Stolle-McAllister (2011) defines social capital as a person's acquaintances and social networks; the more prestigious and well developed their acquaintances and networks are, the

more capital one is perceived to embody. The participants in this study were able to articulate *recommendations of the game to their friends* and understood the implications of playing the game as noted in the following:

- "I'd recommend it to my friends because it's a fun game that might change their life" (61).
- I'm going to tell my friends to start playing the game sooner like in 7th grade so they can be ready" (257).

Another key to college readiness is the significance of the parents. Perna (2009) wrote that parents' educational attainment can virtually serve as an indicator of cultural and social capital. These participants were eager to recommend *College Ready-the Game* to their parents and recognized that playing the game with their parents could help both the students and their parents as indicated in the following responses:

- If parents cannot afford to take their child to visit colleges, they can play the game with them and learn about college with them" (37).
- "My dad and I played the game and he thought a grant is something you have to pay back" (309).

Conclusions

The consistency of the emergent patterns of responses conclude that game-play of College Ready-the Game among teams of AVID students sparks conversations and experiences that developed their college ready vocabulary. It is of utmost importance to note that the bank of vocabulary empowered the students with the verbal facility to earn social and cultural capital. A community of inquiry was established through days such as Team-Building Thursdays, which is

considered an example of components of a *college-going culture*. The students were challenged through *physical movement*, *competition*, and *repetition* of *game-play* that motivated them to learn new vocabulary that helped them achieve their game-winning goals. The students engaged in "college talk" by holding conversations with their counselors, parents and peers. This process earned the students *social and cultural capital* that led them to the critical *predisposition* stage to reflect and take action to pursue college.

Research by Gee (2005), states that a game programmer creates the conditions for players to create *information-movement couplings* from within the game through trial and error, and as a result, they transfer from one experience to another, through *conversations* with others and "*just in time*" prompts in game-play (Gee, 2005). These *conversations* are key to the entire process of learning that occurred during game-play.

The use of *College Ready-the Game* in the AVID classrooms created a *game-as-teacher* model that Hopper (2010) refers to because the game creates game-centered approaches, advocating learning within a social system that encourages learners to continuously adapt their actions to the constraints of the game and the play of others.

This process of game-play added to the *college-going culture* of the AVID classroom and enabled the participants to develop some *social and cultural capital* that led them to enter the *predisposition* phase to pursue a future that includes college, as depicted in Figure 1.

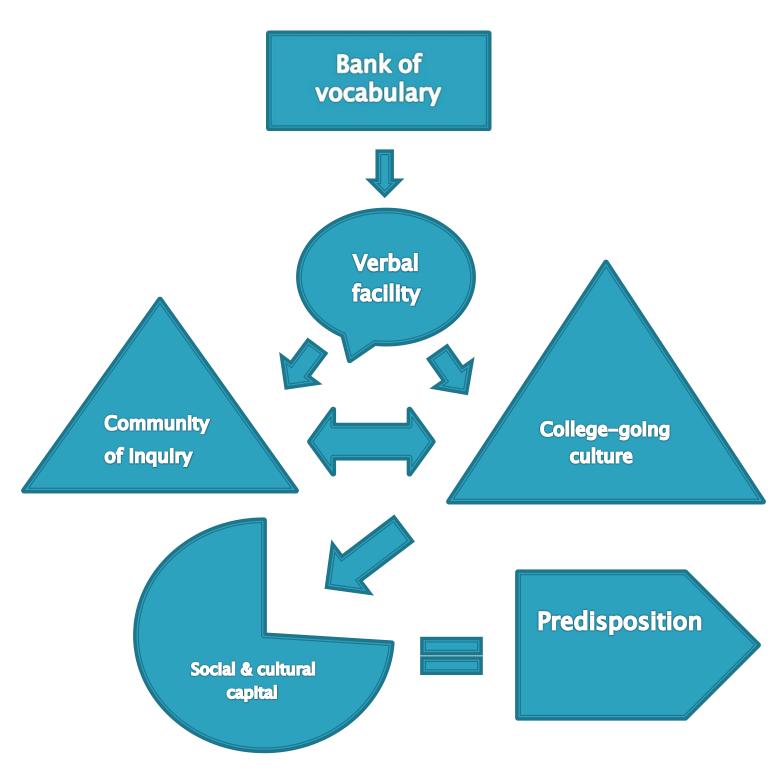


Figure 1. College Ready-the Game process for preparing students to make decisions about attending college.

Connections to Theoretical Framework

Dewey's theory of pragmatism (Field, 2016) is aligned with one of the main influences for the creation of *College Ready-the Game*. The intent behind the development of the game was to create an educational tool with which students can *learn by doing*.

Kitcher (2015) noted that "conceptual progress is made by amending language so as to make it possible to pose significant questions that haven't previously been formulated" (p. 485). While *pragmatism* is considered learning by doing; *progress* consists of the process of overcoming limitations (Kitcher, 2015). Thus, "*Pragmatic progress* consists in overcoming some of the problems of the current state" (Kitcher, 2015, p.478). If children can develop college-ready vocabulary at a young age, perhaps these skills can help them in their current state by avoiding the pitfalls of lagging behind their more affluent counterparts with reference to college admissions.

The results of the study indicate that when children are afforded opportunities to participate in game-play of *College Ready-the Game*, their college-going culture in the AVID classroom is enriched. While their AVID teacher provides college-ready instruction, *College Ready-the Game* reinforces the learning by the repetitive and competitive nature of game-play. Students learn college-ready vocabulary that is instrumental in the conversations they hold with their peers and counselors as they prepare for upper-level high school classes and for post-secondary education.

The learning and the conversations that occur through the experiences of playing *College*Ready-the Game contribute to the development of social and cultural capital of the AVID participants. Additional capital shall be earned as the students continue to play the game and

build their vocabulary. Future conversations are infinite! A sense of pride is also instilled in the students about reaching graduation as indicated by one of the participants, "I like telling my teacher I graduated!"

Implications

Implications for Future Research

Further study is recommended to examine the experiences of AVID students in contexts that differ from this study. Contextual differences may influence the results. For example, because a college-going culture is formed by the conversations and interactions that occur in the various AVID classrooms, much is dependent upon the personality and the leadership of the AVID teacher. Some AVID teachers may allow more time for game-play than others.

Further studies that include Spanish-speaking students may also produce different results. Researchers should introduce the Spanish setting of the game app to Spanish-speaking students. This group of students may be more inclined to play the game utilizing the Spanish language option button on the settings of the game app.

Research that focuses on the experiences of AVID students who play *College Ready-the Game* at home with their families is recommended. All of the participants expressed their desire to recommend the game to their parents, however there were only two experiences in this study in which a parent was actually involved in game-play with their child. Due to this fact, there is too little data to analyze and draw any conclusions about the social and cultural capital that can be developed while the students play the game at their home.

Future research is recommended to compare the longitudinal effects of participants who played the game throughout their school years to students who did not play the game.

Implications for Policy

Since 2008 school leaders have been charged with implementing college readiness standards, it behooves them to seek resources can assist them in creating lessons or opportunities for their students to meet the standards. As a school principal, I am in constant need of resources that are easy to use and that I feel confident sharing with my teachers. The responses from the participants in this study are as powerful as testimonials because it is first-hand knowledge from the lenses of the students who engaged in the game-play of *College Ready-the Game*. Based on the participant responses, the work that went into the creation of the game is paying forward in dividends in accomplishing the goal of developing college ready vocabulary in students and sparking opportunities for students to participate in fun, competitive, and repetitive "college talk." School principals can read through this study and identify with the challenges we principals face as leaders; however, they can also receive comfort in knowing that they too can reach within themselves to create solutions for our students. In the meantime, this game is one principal-created resource that can support school leaders in their quest to meet the college readiness standards and the needs of the students.

Leaders may also challenge the P-20 model and begin informing parents to start building their family's college ready vocabulary at the Pre-K and prenatal stage by immersing their children in "college talk."

Implications for Practice

Students are neither engaged with their fellow classmates nor engaged in any college ready activities much of class-time. For example, when students finish their classwork early, many times their teachers tell them to sit quietly at their desks or pull out a good book to read. Often the students do not have a book handy, so they sit quietly wasting mounting minutes of

precious time. *College Ready-the Game* can help with this practice by being the "go-to" resource for students to engage in with their fellow classmates. The teachers can store some board games within reach of the students and the students can participate in repeated game play. As a result, the students will be immersed in college ready vocabulary.

In addition, teachers may use *College Ready-the Game* to spark college-ready conversations to promote a college-going culture. School leaders and principals can offer their teachers *College Ready-the Game* as a resource to meet the College and Career Readiness Standards put forth by TEA. Principals can use this principal-created example as inspiration to create resources for the future and meet the following T-PESS standards:

- ▶ T-PESS Standard 3- Executive Leadership -principal models personal responsibility and a *relentless* focus on improving student outcomes.
- ► T-PESS Standard 4- School Culture -principal establishes a culture of high expectations for all staff and students.

Recommendations for AVID Teachers and School Principals Who Incorporate College Readythe Game:

- 1. Incorporate *College Ready-the Game* in AVID classrooms in addition to all other types of classes as an option for repeated game-play for students.
- 2. Ensure the students are clear that more than one round can be played every time students play the game.
- 3. Familiarize the students with the settings button and share the Spanish option.
- 4. Consider assigning homework to students to check out the board game to take home and play with their parents to spark college ready conversations at home. Require the

students to journal their reflections of family-game-play as an assessment for the homework.

5. Continue the friendly context of competition and repetitive game-play.

Recommendations for the Creator of the Game and Creators of Games:

- Conduct studies that include families of English Language Learners (ELLs) to determine if the Spanish language setting is of benefit.
- 2. Add more questions to the game that involve exercises or physical movement.
- Add larger and bold-faced font to the instructions section to notate the fact that players may play as many rounds as they choose.
- 4. Continue to include miniature characters of diversity that create a familiar feeling to the players.
- Continue to include the color green for games that are intended to evoke success, money or growth.

Epilogue

As a first-generation Latina female doctoral student, and a high school principal, I have grown personally and professionally by participating in the TAMU-CC Educational Leadership program. In fact, while I was learning about *social and cultural capital* through this study, I have *actually earned social and cultural capital*! During my doctoral classes, I participated in *discourse* among my prestigious acquaintances and social network, which is similar to the experience of the conversations that the AVID students participated in with their social network. The *discourse* was grounded in theories such as *Critical Race Theory* or *Divide and Rule Theory* from Freire (2000). This experience has broadened and deepened my approach to learning.

Discourse is Made Up of "Words."

Freire (2000) states that "within the *word* we find two dimensions, *reflection and action*. If one is sacrificed the other immediately suffers. Thus, to speak a true *word* is to transform the world" (p. 87). (Remember that I previously stated that principals can transform the world? Well, that's it! This study indicates that we principals can provide *words* to transform the world!)

Take for example the minority and economically disadvantaged group. If we go back to the root of their educational years, is it possible that they have been victims of the "divide and rule theory" (Freire, 2000)? In this theory, the oppressor divides up the oppressed in order to maintain power over them. If this group of people are never exposed to the "word" or college-ready vocabulary, then they will continue to remain as an oppressed group and the college readiness gap will continue to widen. As school leaders we can impact change and transform their world by providing opportunities for quality *discourse* filled with college ready vocabulary *words* in our schools and among our students and teachers! A catalyst for building social and cultural capital!

The TAMU-CC Educational Leadership Doctoral Research Program experience has significantly reinforced my convictions as a school leader and as a game creator.

As school principals, we are expected to seek solutions to lead our schools toward meeting state and federal mandates. One thing I have always believed is that if I cannot *find* solutions, then I challenge myself to *create* solutions. When I could not locate an easy-to-use resource for my teachers to utilize to develop college ready vocabulary, I reflected and asked myself, "So what are you going to do about it?" If more school principals would create

educational resources, then we would not have to settle for mediocre resources created by people who are not familiar with education. We, as school leaders, have the experience and ingenuity to offer unique opportunities to our students. We can profoundly impact the educational experience of thousands of students, parents, and teachers. We do not and cannot take these tasks lightly! Furthermore, principals are in the trenches of educational jargon and bureaucracy, yet our work is dependent upon human capital. Our task involves bringing out the best in our human capital so that they can bring out the best in our students and successfully meet their needs. If we do not have the resources to put into the hands of our human capital, then let's create our own! Quality leaders do not wait to be handed solutions. We take the lead!

I knew I had taken a risk by investing in and creating a college ready game. It is a fact that the game has been implemented in many classrooms throughout several districts. What was not previously known was the actual perceptions of the students who played the game. This research has been incredibly valuable to me because it allowed me the privilege to see through the lenses and reach into the minds of students who played the game. It gave me the opportunity to challenge my objectivity. For example, by conducting this research, I had to accept that even though the game was my personal creation, I could not allow that to cloud my notations of the interviews. I had to come to the realization that I may receive responses that I did not want to hear, but if I wanted to improve the game or discover any of the benefits of the game, then I had to listen and learn from every response with an open mind.

This research has reinforced my commitment to serve as a change agent and lead by example. Through this experience I learned that the resource I created changed the way some AVID teachers infuse college ready vocabulary in their lessons and activities. The favorable

responses from the research interviews reaffirmed my commitment to take a risk and continue to create resources that will benefit students and teachers and help principals meet the expectations mandated by the state and federal agencies. The responses from the participants were both humbling and personally rewarding because I learned that the game I created has proven to spark quality opportunities for students to learn college ready vocabulary and perhaps transform their world.

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APPENDIX A

CONSENT FORM

Research Study about the experiences of AVID Students as they Play College Ready-the Game, an Educational Board Game and Game App

Introduction

The purpose of this form is to provide you (as the parent of a prospective research study participant) information that may affect your decision as to whether or not to let your child participate in this research study. This form will also be used to record your consent if you decide to let your child be involved in this study.

If you agree, your child will be asked to participate in a research study. Your child has been selected to participate in a research project studying experiences of middle and high school students who are AVID students as they play College Ready-the Game, a board game because your child has experiences playing the board game in his/her AVID class. The information collected in this study will help inform the researcher about the potential learning that occurs as students engage in and play the board game. Your child was selected to be a possible participant because he/she is a CCISD AVID student. This study is being conducted as part of the Education Leadership Doctoral research study conducted by Cecilia R. Perez. The purpose of this study is to interview AVID students about the experiences they have from playing the educational board game, College Ready-the Game.

What will I be asked to do?

If you allow your child to participate in this study, he/she will be asked to answer questions about the experience they have had over the past semester playing College Ready-the Game in their AVID class. This study will include an interview that takes approximately 30 minutes.

Your child will be audio recorded during the interview.

Your child will be provided a copy of the Assent Form. (see attached)

What are the risks involved in this study?

Students may feel pressured to participate and there may be breach of confidentiality due to the audio recordings. Note that the audio recordings will be under lock and key that will only be available to the researcher. Recordings will be erased after 3 years. No identifying statements will be made on the audio recordings.

What are the possible benefits of this study?

The possible benefit of participation is the learning of new college readiness vocabulary.

Does my child have to participate?

No, your child does not have to be in this research study. You can also agree to allow your child to be in the study now and change your mind later without any penalty.

This research study will take place during regular classroom activities.

What if my child does not want to participate?

In addition to your permission, your child must agree to participate in the study. If your child does not want to participate he/she will not be included in the study without penalty. If your child initially agrees to be in the study he/she can withdraw at any point during the study without penalty.

Will there be any compensation? No, there is no compensation.

Who will know about my child's participation in this research study?

This study is confidential. No identifiers linking you or your child to this study will be included in any sort of report that might be published. Research records will be stored securely and only I will have access to the records. If you choose to allow your child to participate in this study, he/she will be audio recorded. Any audio recordings will be stored securely and only I will have access to the recordings. Any recordings will be kept for 3 years and then erased.

When and where will my child participate?

Researcher will email all 4 AVID teachers and instruct them to put all of the names of their students on their AVID roster into a box and randomly select up to 5 students to contact by phone to invite them to participate in the interview process. Researcher will email the teachers the Parent Consent form, Assent form and Teacher Consent form. Researcher will instruct the Teacher to email the parents the forms as well. (AVID teachers have their students for a minimum of 3 consecutive years so the teachers are in routine contact with parents and students.) If a teacher is unable to contact their AVID students and parents during the summer then the selection and contact will be made when school resumes in August of 2017. The interviews will occur in late August and early September, 2017.

Whom do I contact with questions about the research?

If you have questions regarding this study, you may contact me, Cecilia R. Perez at 361-815-5538 or email cissy.perez@yahoo.com

Whom do I contact about my child's rights as a research participant?

This research study has been reviewed by the Institutional Review Board and/or the Office of Research Compliance at Texas A&M University-Corpus Christi. To report a problem or for questions regarding your rights as a research participant, contact the Research Compliance and Export Control Officer: (361) 825-2497

Signature:

Please be sure you have read the above information, asked questions and received answers to your satisfaction. You will be given a copy of the consent form for your records. By signing this document, you consent to allow your child to participate in this study.

Signature of Parent/Guardian: Date: _	
Printed Name:	
Printed Name of Child:	
Signature of Person Obtaining Permission:	Date:

APPENDIX B

Interview Questions for Participants:

- Describe your experience when playing College Ready-the Game in your AVID class.
- 2. Have you learned anything from playing College Ready-the Game? If so, what?
- 3. What would you change about the game if you had the chance to change anything?
- 4. Is there anything about the game like the colors, sounds, graphics that attract you to a game? If so, tell me more about that.
- 5. Have you learned anything from the game that will help you when you meet with your school counselor? Tell me about that.
- 6. Have you learned anything from the game that will help you prepare for high school graduation? Tell me more about that.
- 7. Do you prefer playing the board game or the app version of the game? Tell me more about that.
- 8. Would you recommend other students to play the game? If so, why or why not?
- 9. Have you played the app in Spanish? If not, would you be interested in playing the Spanish game app? If so, why or why not?
- 10. Do you think parents would benefit from playing the game with their son/daughter? If so, why or why not?
- 11. What is your favorite part of the game?

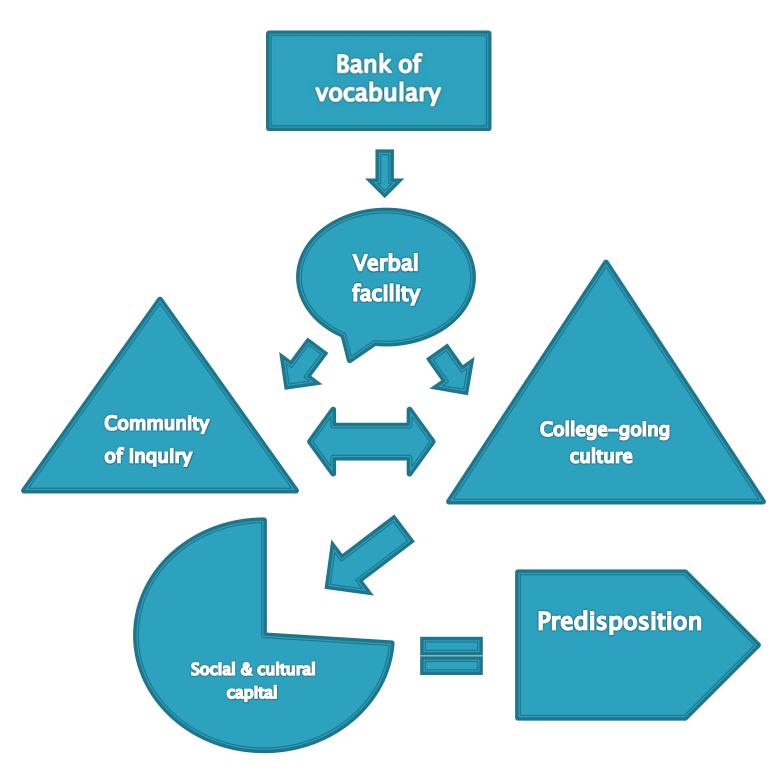


Figure 1. College Ready-the Game process for preparing students to make decisions about attending college.