

A STUDY OF COLLEGE DEVELOPMENTAL READERS: THEIR HISTORY, PRACTICES,
AND PERSPECTIVES

A DISSERTATION

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

IN THE GRADUATE SCHOOL OF THE

TEXAS WOMAN'S UNIVERSITY

DEPARTMENT OF LITERACY AND LEARNING

COLLEGE OF PROFESSIONAL EDUCATION

BY

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DENTON, TEXAS

DECEMBER 2022

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ACKNOWLEDGEMENTS

I would like to express my gratitude to Dr. Mandy Stewart, my advisor and committee chair, for helping me every step of the way and for encouraging and challenging me. I have learned so much from you. A sincere thanks to my other committee members, Dr. Amy Burke, Dr. Karen Dunlap, and Dr. Pat Watson. Dr. Burke, thank you for your kind and gentle way of giving suggestions and for helping me remember to include the important details. Dr. Dunlap, thank you for serving as the expert from the teacher education perspective. Dr. Watson, thank you for asking those tough questions, for the detailed feedback that you have given me throughout my doctoral program, and for seeing me through this process even after your retirement. Thank you to all my professors and classmates at TWU for your help and support. Thank you to my study participants. You were a joy to work with, and I would have no dissertation without you. I would also like to express my appreciation to Dr. Emilie Simeon, a teacher who never stopped teaching, encouraging, and believing in me. Thank you to Dr. Joseph Milner who taught me how to be a teacher and who has continued to advise me for over thirty years. To my parents, Mary Lou and Wilbert Faircloth, you taught me the value of education and hard work. You have supported me my entire life, and I could never thank you enough. To Suzi, thanks for always cheering me on. To Carole, thanks for being my guardian angel. To Michael, thank you for loving, encouraging, and believing in me. To Cara and Seana, thank you for motivating me to be the best that I can be. I hope I have encouraged you to keep working hard to reach your goals. To the Butts, Faircloth, Kelly, Matthews, and Suit families, thank you for your constant love and support. I love you all.

ABSTRACT

LISA FAIRCLOTH KELLY

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DECEMBER 2022

Many high school graduates begin college and quickly realize that there is a discrepancy between their high school reading experiences and the expectations of reading for college classes. These students are often placed into developmental reading courses, often based on standardized test scores, to improve their vocabulary, reading comprehension, and disciplinary literacies. There are a multitude of reasons that these students may not possess the reading skills that they need for college. This qualitative case study examines the influence of factors such as engagement, metacognition, and disciplinary literacies among four college students in developmental reading at a university in North Texas. The purpose was to analyze their literacy experiences, reading processes and strategies, and attitudes toward reading. Based on findings from this study, I provide suggestions for K-12 and college literacy education to promote success as students transition from high school reading to college reading.

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CHAPTER I

INTRODUCTION

Many high school graduates begin college and find that the instructional experiences and expectations in their K-12 school years do not align with expectations at the college level. Not all students receive the preparation that they need for college reading in secondary school English classes. According to Williamson (2008), there is a continuum of college readiness as it relates to textbook reading and learning. Proficient high school readers are not necessarily proficient college readers because the demands of college reading are different. A comfortable reading of a typical high school text may only prepare a student for “one fourth of the reading materials in military, citizenship, and workplace text collections and perhaps as little as 5% of postsecondary texts” (p. 603).

In 2015, the National Association of Educational Progress (NAEP), data indicated that only 37% of 12th graders were proficient in reading. This data, also known as the Nation’s Report Card, rates students in the United States based on their reading and math skills. There are three basic levels of achievement: Basic, Proficient, and Advanced. Only 37% achieved the advanced level in reading, which indicated that only this percentage of students in United States schools demonstrated what the NAEP calls mastery over challenging subject matter. Students who are not in this percentage of students achieving an advanced level may end up in developmental reading classes, which are classes that are specifically designed to help college students improve their reading skills. According to Holschuh and Paulson (2013), there are approximately 3.6 million American college students who require developmental education, and 20% of them require this extra support in a reading-specific class.

Echoing Williamson's 2008 study, a study by Wahleithner (2020) indicated that there is a mismatch between the reading skills learned in high school and those needed for college.

Students in this study reported that the high school skills that they learned were basic comprehension skills. They reported that they were not prepared for the rigor and the analysis typical of college reading, including the reading and writing needed in specific disciplines.

Consequently, this study investigated the literacy experiences of college developmental readers, the reading comprehension processes and strategies that they use and where they learned them, and their attitudes toward reading.

College Developmental Reading: Past, Present, and Future

The history of developmental reading is significant because not much has changed over the years. The problems that existed many years ago still exist today. The background of developmental reading is important because changes need to be made in order to help high school and college students be better prepared for the type of reading that they will encounter in college and beyond.

Past

The need for college developmental reading programs is not new. Developmental reading goes far back in history. According to Stahl and King (2009), developmental education dates back to 1636 near the beginning of colleges in the United States. Thus, almost as long as there have been colleges, there have been college students who needed extra help in reading.

In 1901, Copeland and Rideout described some students in freshman English at Harvard as being illiterate and inarticulate and others as being mature readers and writers, emphasizing huge discrepancies between the skill levels of freshmen. Gray (1936) wrote about factors that contributed to poor achievement in reading at the college level. Some of those were related to

inadequate testing, limited vocabulary, visual defects, improper thinking strategies, and bad reading habits and attitudes toward reading, indicating that there were a variety of reasons for poor achievement at this level.

Similarly, Triggs (1943) wrote that the American public did not read widely, often, or critically. She also wrote that students do not receive any specialized reading training after the early elementary school years, and that students who enter college are not prepared for the type of reading that is done there. She stated that only one quarter of Americans read books and that parents and teachers are not good role models as readers because many of them do not read. Many would say the words written by these authors are still true today.

Present

In this section, the present state of college developmental reading will be explained. The needs for developmental reading, the testing and placement for the courses, and the course design will be discussed.

Need

Students are usually placed in developmental reading classes due to low scores in vocabulary and/or reading comprehension. They may not be able to engage with text or know how to use metacognitive or disciplinary literacy skills, or they may not have been adequately prepared with the skills that they needed for college. Some students may not have taken classes that challenged them with more advanced reading due to perceived academic potential or class placement.

Students who take developmental classes have lower graduation rates, and this not only impacts the students, but also the college and the community of the developmental students. Since funding is based on student performance, all stakeholders should help developmental

readers succeed (Renmark, 2019). There are many reasons that developmental reading classes are needed at the college and university levels, and just as many reasons that students may not have the skills that they need to be successful in college without developmental reading programs. Some of these reasons relate to how reading is taught in secondary schools, and some reasons are unique to the individual learners.

Alexander (2005) suggested that reading is a life-long, developmental process that does not just take place in elementary school, and according to Alvermann (2002), adolescents have different learning needs from younger students, so they cannot be taught the same way. In addressing how adolescents should be taught, Alexander (1997), like Alvermann, stated that reading instruction for secondary and college students should include the domains of motivation, cognition, and strategies in order to be successful. Therefore, reading instruction should continue through the college level and should be applicable to all content areas.

Eckert (2008) believed that the need for developmental reading is the result of a gap between secondary and postsecondary reading instruction. Middle and high school reading and English classes may not adequately prepare students for college-level classes and the skills needed for college-level reading. In response to this, there have been some models of instruction made for a bridge year or a summer bridge program for developmental students to connect high school learning to college learning (Barnett et al., 2012; Strayhorn, 2011). Also, redesigning the high school reading curriculum could potentially help this problem, too. If high school teachers and college professors worked together to design the appropriate curriculum, improvement could be seen. Simpson et al. (2004) wrote that high school students need to know how to transfer strategies to different types of reading, not just learn skills. It does no good to learn the skills and strategies if they cannot be applied to authentic tasks.

In addition to the possibility of students not having reading instruction in middle or high school that adequately prepares them for college reading, there are a multitude of other reasons why students might fall behind in reading from the very beginning to the later years of school. For example, students who are English learners and those who come from lower income families with fewer opportunities to read texts may start school with limited reading experiences due to less exposure to English books and sounds (Hammer & Miccio, 2006). Students may have learning disabilities or vision issues that affect their reading as described in a study by Thurston (2014). Students who are not placed in advanced classes during their school years may have inferior reading skills due to their class placement and may not come to college as well-prepared as others who have had these opportunities (Campbell-Cunefare, 2020). These modern-day factors are reminiscent of Gray's writing in 1936, suggesting that not much has changed regarding the need for developmental reading programs at the college level.

Testing and Placement

Many states, like Texas, have placement tests that are used to indicate whether or not students need developmental reading classes. Texas uses the Texas Success Initiative Assessment (TSIA). Students who score below the qualifying score will need to take a developmental reading class prior to enrolling in regular freshman reading or English courses. The developmental reading class (or the placement test) must be passed in order for students to proceed with other courses in English (Texas Education Agency, 2022).

Other states do not require developmental reading classes. Florida passed a law in 2013, Senate Bill 1720, which allows students to skip placement testing for and enrollment in developmental reading courses. According to Senate Bill 1720, if a student entered the ninth grade in a Florida public school in 2003 or after, graduated from a Florida public high school

with standard Florida high school diploma, or is a student serving as an active duty member of any branch of the U.S. Armed Services, he/she will not be required to take placement testing for developmental classes (Florida Senate Bill 1720, 2013). Even though many can opt-out of developmental reading classes in Florida, the community colleges still have year-round developmental reading classes that are filled with students who need extra help in reading.

Course Design

There are many different types of developmental reading classes with different areas of focus, according to Holschuh and Paulson (2013). Many developmental courses are designed to help students improve their vocabulary and reading comprehension skills. For example, one model of a developmental reading course focuses on vocabulary, metacognition, and reading comprehension strategies for a variety of text types, including the identification of text structures and tools for better disciplinary literacies. Some colleges and universities even pair developmental reading courses with core courses in order to help students learn to actively apply disciplinary literacy strategies. There has been a shift from content area literacy to disciplinary literacy and the specific demands and needs of particular discipline areas instead of just overall strategies. For example, a general reading strategy such as SQ3R just applies generally and may not always be suitable to all disciplines. According to Moje (2008), general strategies do not emphasize what it means to learn in each unique subject area.

Brozo et al. (2013), created the PILLAR process, which uses aspects of both content area literacy and disciplinary literacy. It also includes technology as a resource. The PILLAR steps are as follows: Preview, Identify (major concepts), List (concepts), Look (online for more information), Attempt (to make sense of the reading), and Read. In their study, students who

used the process described it as time-consuming but admitted that it was helpful in getting the information and understanding it better.

Holschuh and Paulson (2013) wrote in *The Terrain of College Developmental Reading* that college reading instruction should be multidimensional, including social, cognitive, metacognitive, and affective processes. This adds some more dimensions to the previous writings of Alexander (1997), and it suggests that developmental reading is evolving to meet the needs of the college learners of today.

According to a recent article by Park-Gaghan and colleagues (2020), the current trends in developmental education course design are as follows: compressed, contextualized, modularized, and corequisite courses. Compressed courses are designed to meet more frequently in order to cover two sequential courses in a single semester. Contextualized courses apply learning to a student's intended major, making the material relevant for the student. Modularized courses use assessments to guide the curriculum, allowing students to only work on the areas in which they need the most help. Corequisite courses are developmental non-credit courses taken alongside college courses for credit.

Future

College developmental reading courses have become problematic for some students because they are required courses, but they do not count for college credit. Basically, students have to pay for the courses, but do not get any credit for them. They only serve as a prerequisite for a gateway course (Park-Gaghan et al., 2020). For example, a student might need to pass developmental reading prior to taking a freshman English course.

States

As indicated by the passing of Senate Bill 1720 in 2013, Florida has changed its policies and processes for developmental readers in order to allow more students to start out in gateway courses, as opposed to developmental courses. Many other states are looking at their developmental reading courses to try to improve the curriculum to help students be more successful in their core classes. Still others are pairing courses to make the best learning environment for students. Improved communication between high schools and colleges about curriculum and closer examination of testing policies and those students who are required to take developmental reading classes could help to inform policy makers so that policies can be passed to better prepare students for college reading (Parker, 2018).

Effectiveness

Simpson et al. (2004) suggested that the effectiveness of developmental reading cannot be properly assessed without looking at students reading over time, and that college reading success should be examined well beyond developmental coursework. The need for developmental reading remains the same, but the future of developmental reading will continue to change as course design and assessments change.

Developmental Reading and Educational Equity

Recent research indicates that there is a disproportionate number of Black and Hispanic students—as compared to White students—enrolled in developmental reading classes. The reasons for this could be the standardized tests that are given in order to determine who qualifies for or needs the developmental classes (Nix et al., 2020). It could also relate to the preparation that minority students have received leading up to the college years. As explained by Campbell-Cunefare (2020), non-traditional Advanced Placement (AP) students—which often include Black

and Latinx students—generally perform better in college courses than those who do not take AP classes, and therefore, more Black and Latinx students should be encouraged to participate in AP courses. Suggestions have been made about how educators, schools and districts, policymakers, and The College Board can make a difference in helping to create change and encourage more participation of racial and ethnic minorities in AP classes.

One of the suggestions on how to improve this problem with equity is to encourage more Black and Latinx students to enroll in AP classes. A study by Scafidi et al. (2015) found that African American, Hispanic, and low-income students were half as likely to take AP Economics in a study done in the Georgia public schools. Another study done by Scott et al. (2010) found that students with AP credit outperformed students without AP credit in college classes, regardless of SAT scores, class rank quartile, or gender or ethnicity, indicating that AP classes better prepare students for college academic work.

Baker-Bell (2020) describes anti-Black linguistic racism in English classes and how Black language is not always appreciated or considered academic, so Black students may be viewed as less educated because of their family or community language. Educators, schools, districts, policymakers, and the College Board all need to become more educated about this lack of diversity in the student population of AP classes so that positive changes can be made. If Black students are not included in the more advanced classes, such as AP classes, they may not have the same opportunities and advantages as other students, and, therefore, may end up in developmental reading classes.

Some states are changing the placement of students in developmental reading classes. These changes are an attempt to decrease the number of students taking developmental reading classes in order to help improve the graduation rates and morale for minority students who are

often placed into developmental reading classes at a disproportionate rate to White students. Studies by Attewell et al. (2006), Perry et al. (2010), and Ross et al. (2012) have shown that Black and Hispanic students are more frequently enrolled in developmental courses than White students. Also, Bailey et al. (2010) and Complete College America (2012) as cited in Park-Gaghan et al. (2020) describe developmental courses as being “the main obstacle in achieving the academic momentum necessary to be successful in postsecondary education” (p. 657).

Since Senate Bill 1720 in 2013, there has been a decrease in the number of Black and Hispanic students in developmental reading classes. There has also been a significant improvement in the number of students who are starting with gateway courses instead of developmental reading classes and in the number of students who are graduating from college programs. These results have been achieved not only by ending the requirement of developmental reading classes, but also by providing better advising and academic support for students. Recent research relating to gateway courses and passing rates suggests that many students who may have been previously placed in developmental reading classes were capable of passing gateway courses (Park-Gaghan et al., 2020).

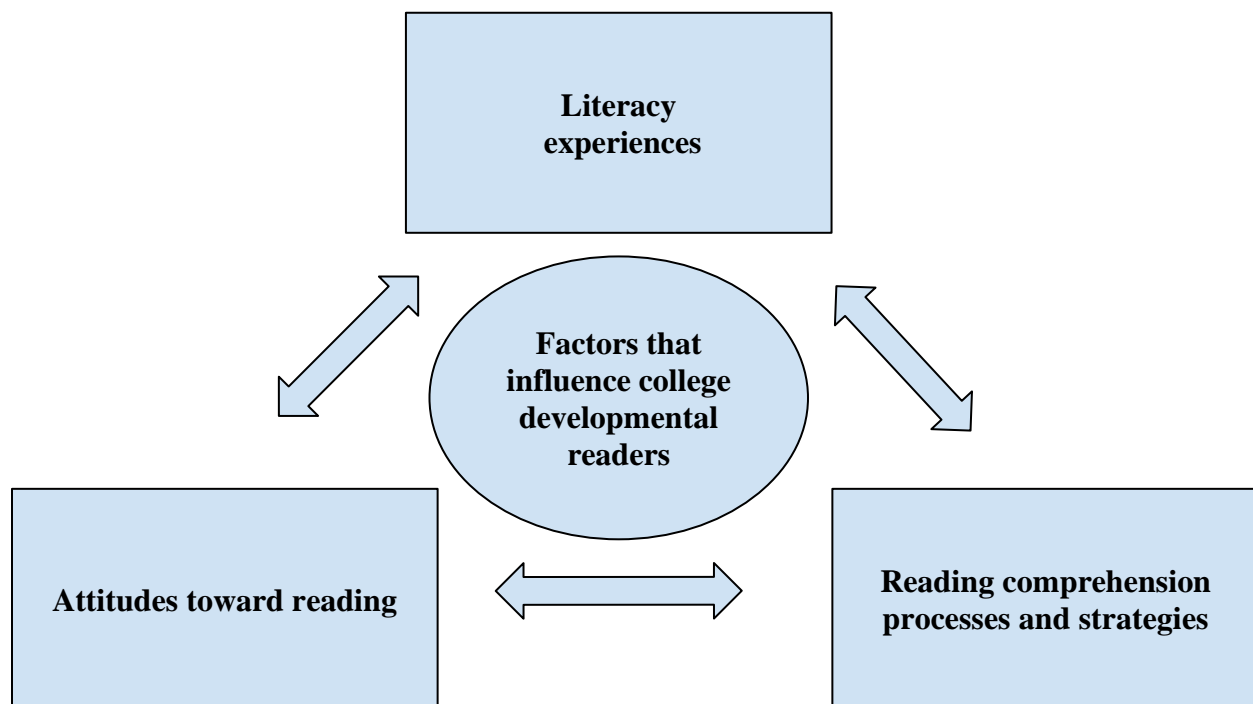
Purpose of the Study/Research Questions

The purpose of this study is to explore the literacy experiences and practices of students currently enrolled in a college developmental reading class. The research questions are as follows: (1) How do developmental reading students recall and describe their literacy experiences, in and out of school?; (2) How do developmental reading students describe the processes and strategies they use for comprehending text, and where did they learn these processes and strategies?; and (3) How do developmental reading students describe their attitudes toward reading, in and out of school?

Figure 1.1 below shows a visual representation of the research questions and their areas of focus. All three areas of focus are equally important in the research, and they connect in order to obtain a full understanding of factors that influence college developmental readers including their literacy experiences, the reading comprehension processes and strategies that they use, and their attitudes toward reading.

Figure 1.1

Content of Research Questions



Significance of the Study/Contribution to the Field

A study by Remark (2019) indicated that there has not been much research done with developmental readers and how they view themselves, their skills, and the strategies that they use. This lack of voice from developmental readers themselves was also mentioned in studies by

Connor (2013) and Randel (2014). The information found in this study will be authentic and purposeful, since it will come from the developmental readers themselves.

This study will provide information that can help secondary school teachers, college instructors, and teacher education professors to be better prepared to collaborate in order to provide the resources that are needed to prepare high school students to be successful in college and in their careers. This collaboration among educators could help to improve instruction at both secondary and post-secondary levels. There is a need for secondary teachers to obtain professional development in order to help their students make better use of metacognitive strategies and disciplinary literacies, whereas collaboration among disciplines at the college level could also be beneficial to college readers.

Definitions

In this study, I will use the following terms and definitions:

Adolescent: For the purpose of this study, adolescents will be defined as those in sixth grade through early college, or students from ages 12 to 20.

Advanced Placement (AP): A program created by The College Board that allows high school students to take college classes. AP classes are classes with an advanced curriculum. Students who pass the AP exams can get college credit for their classes (College Board, 2022).

Constructivism: A theory of learning that explains how individuals actively construct knowledge by interacting with other people and their environment (Unrau & Alvermann, 2013).

Content Area Literacy: Basic reading strategies that can be applied to all content areas Ex: SQ3R (Survey/Question/Read/Recite/Review).

Developmental Education: Developmental courses are designed to develop the skills of underprepared college students in the areas of reading, writing, or math. Students are usually determined to be developmental according to standardized test scores (Ganga et al., 2018).

Developmental Reading: Developmental educational classes that focus on reading. These classes teach reading strategies to students who are considered underprepared for college reading. Often developmental reading classes are no-credit classes that are prerequisites for gateway classes, such as freshman English.

Disciplinary Literacy: Discipline-specific literacy or literacy that emphasizes knowledge within the discipline and the unique tools that those in the discipline use (Shanahan & Shanahan, 2012)

Document-Based Question (DBQ): A document-based question (also called data-based question) is a question that is often used in AP tests. DBQs typically use a series of questions based on several texts. The reader is asked to synthesize information from the texts and use his/her knowledge to create an answer.

Educational Equity: Equal opportunities for education and resources for all students, regardless of sex, race, socioeconomic level, or other factors.

Engagement Theory: This theory describes how a learner interacts with her or her learning.

First Time in College (FTIC): Adjective to describe a student who has never been in college.

Gateway Courses: Introductory college-level courses that fulfill degree requirements (Park-Gaghan et al., 2020)

MAPPS: MAPPS is a comprehension strategy that includes the following process: **M** – Mark or annotate as you read **A** – What is the reading about? **P** – What is the point of the reading? **P** – What is the proof? **S** – Summary

Metacognitive Theory: A theory that describes the process by which learners think, reflect, and self-regulate as they are learning, showing an awareness of their own learning (Flavell, 1976)

PILLAR: The PILLAR process is a comprehension strategy that uses aspects of both content area literacy and disciplinary literacy. The PILLAR steps are as follows: Preview, Identify, List, Look, Attempt, and Read (Brozo et al., 2013).

Professional Learning Community (PLC): A community of people who come together to meet an educational goal. Often educators will form a PLC in order to collaborate in order to improve an issue of concern.

Reading Strategies: Techniques and skills that students use in order to read and comprehend text.

SQ3R: SQ3R is a content area literacy reading comprehension strategy. The steps are as follows: Survey, Question, Read, Recite, Review.

Texas Success Initiative Assessment (TSIA): A placement test given to Texas high school students for college placement in reading, writing, and math. This test is used to place students into college developmental reading (Texas Education Agency, 2022).

Summary

In this chapter, I gave background information about college developmental reading including its past, present, projected future, and lack of educational equity. I explained the problem and context for the study, and I presented the research questions that were used to guide the study. I provided definitions of terms that were used in this study. I stated the significance of this study and how it contributes to the field of reading. In the next chapter, I will provide a review of literature and the theoretical framework for the study.

CHAPTER II

LITERATURE REVIEW

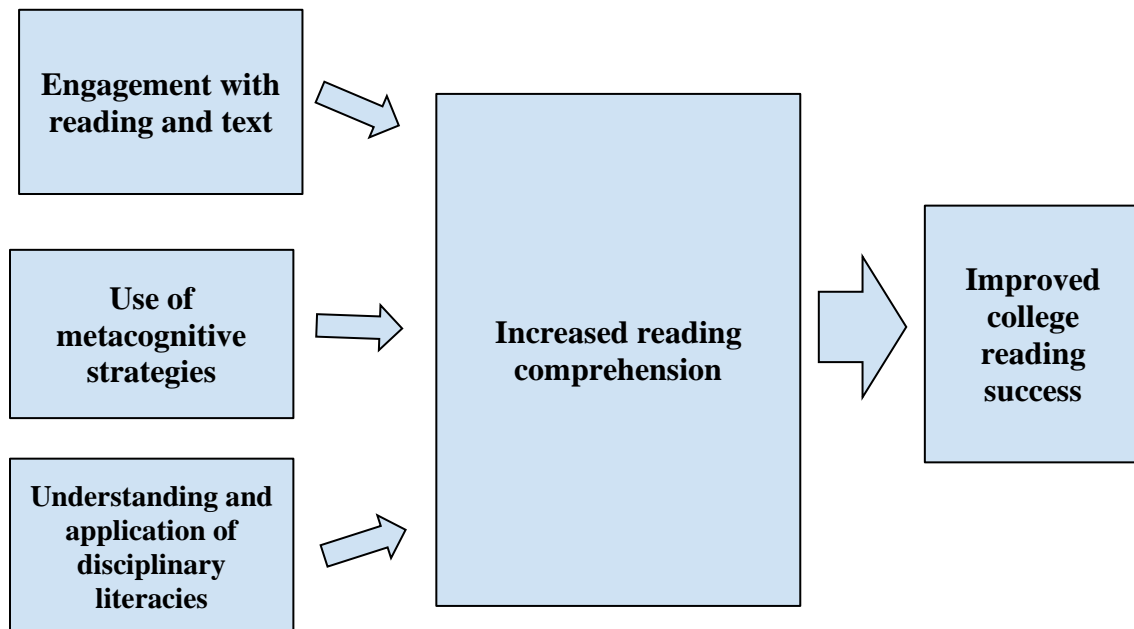
Introduction

High school graduates need to be prepared to move on to college and be successful readers of college-level text. They must be able to engage or connect with texts that they are reading and use metacognitive strategies in order to move through the text with meaning, knowing how to pace themselves in order to comprehend the text. An understanding of disciplinary literacies is also important for core classes and the reading and writing that those classes require. These areas come together to create improved reading comprehension processes and strategies, which are the key to college reading success.

This chapter includes a review of literature which describes the components of college reading and the theories that support them. Constructivism, the engagement and metacognitive theories, reading and disciplinary literacies will be explained. All of these areas come together to create improved reading comprehension and more successful college readers. Figure 2.1 below shows how these three areas merge to create increased reading comprehension and improved college reading success. I will discuss each area in its own section in this chapter.

Figure 2.1

Components of College Reading Success



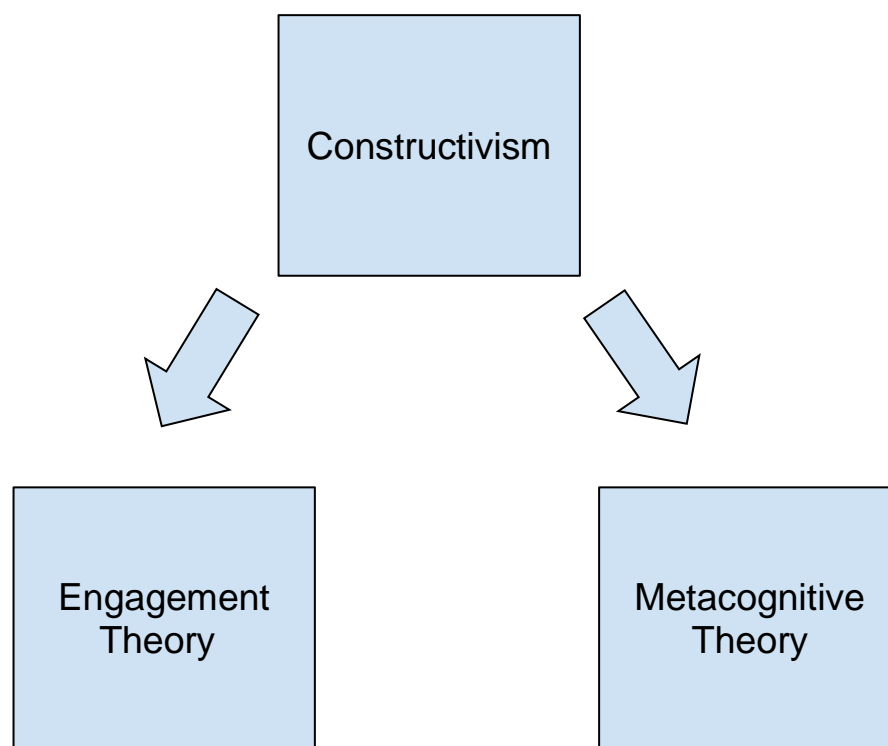
Constructivism

According to Unrau and Alvermann (2013), constructivism is a “widely applied theory of learning that explains how knowledge and meanings are constructed, rather than transmitted or absorbed, through our interaction with others and the environment” (p. 57). According to the constructivist theory, a learner builds new knowledge and meaning while using prior knowledge, his/her surroundings or environment, and social interaction. As it relates to reading, constructivism can be unobservable and involves the testing of hypotheses and the use of inferences (Tracey & Morrow, 2017). For example, reading is not always observable because we cannot see what the reader thinks as he/she reads. Also, as a person reads, he/she may test a hypothesis as they guess at a word meaning or the plot of the story and may make inferences

about what is being read. The engagement and metacognitive theories are both constructivist theories because they involve a reader's use of prior knowledge, surroundings, and social interaction as ways to construct meaning from text. The connections between these theories are represented in Figure 2.2 below.

Figure 2.2

Two Constructivist Theories



Engagement Theory

Engagement theory is a theory that describes a learner's interaction with his/her learning. Engagement is very important for literacy. A reader needs to be engaged with or interested in and actively participating in the reading of a text. An engaged reader is more likely to make

connections with the text and relate to it in some way. According to Lau (2009), engaged readers read 8 times more and read more widely than disengaged readers.

Although many of the popular researchers of reading engagement published their findings in the early 2000s, the need for engagement is not new. As early as 1941, Triggs wrote about college students and their lack of engagement and noted that many college students do not read much or at all. She also noted that students are rarely taught any reading skills beyond early elementary school, so students may not have the skills and strategies that they need for reading success. If they do not read, they do not have opportunities to engage with text.

Guthrie and Wigfield (2000) from the University of Maryland are perhaps the most well-known researchers in the field of engagement. They published a diagram that detailed the necessary elements of engagement. The main elements were prior knowledge, cognitive skills, social interaction, and reading strategies. Peripheral elements included teacher support, choice, outside (of school) literacies, and authentic texts and purposes for reading. All of these elements contributed to student engagement.

Motivation Versus Engagement

Engagement is often associated with motivation, although they are not the same. One can be motivated but not engaged, or engaged in some capacity but not motivated. As it relates to reading, an engaged reader connects with the text. A reader can be motivated to read, but still not be able to engage properly with the text.

Guthrie and Cox (2001) also studied intrinsic (from within) and extrinsic (external) motivation using two groups of students and how motivation can affect engagement. One group used a regular classroom model, and the other group used a model with supports, motivation, and encouragement along the way. The group that was provided with the motivation and

encouragement performed better on reading assignments than did the control group. This represented the value of motivation in relation to reading comprehension. More highly motivated students were more engaged with texts and performed better on reading comprehension assignments than did their less motivated and engaged (and less encouraged) peers. This study also noted that teachers can directly affect engagement through their planning and support and the strategies that they teach students.

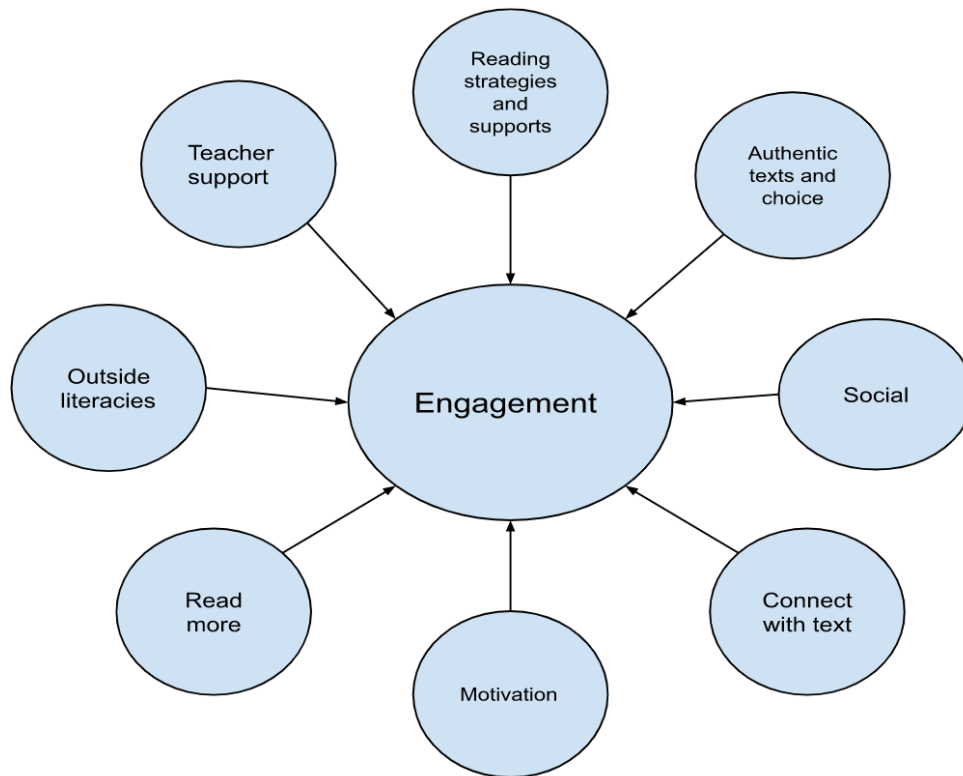
Engagement in the Classroom

In another study, Guthrie et al. (2004) studied 9-year-olds in science classrooms. One group of third graders used a system called Cognitive Oriented Reading Instruction (CORI) and a themed learning unit. The other group just used a normal (traditional) science class curriculum. Those using the CORI method were more engaged in reading, and they outperformed the others using the regular science unit. Students from less educated families and lower socioeconomic levels in the CORI group outperformed those in the regular group from higher educational levels and socioeconomic levels. This indicated that the power of engagement outweighs the advantages that parents' education and socioeconomic status provide.

Figure 2.3 below shows some of the elements of engagement and how they work together to create an engaged reader. Learning to utilize reading strategies and other supports, being able to use authentic texts and having a choice as far as what to read, and social interactions in the classroom all help students to become more engaged in their reading and more likely to connect with text. Students are motivated to read more when they are engaged. The value and use of outside literacies and teacher supports also increase student engagement in reading.

Figure 2.3

Engagement



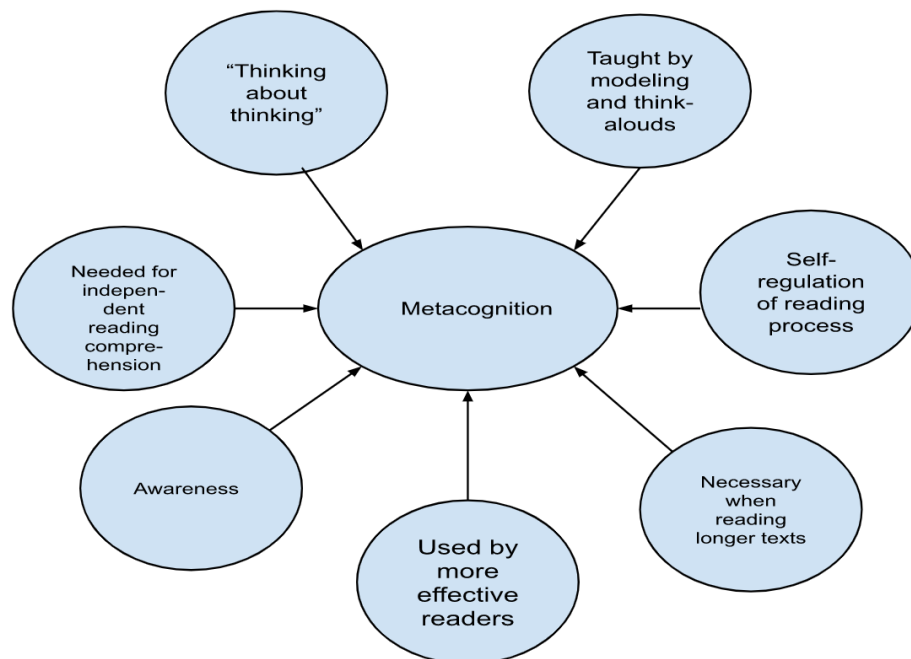
Metacognitive Theory

The importance of engagement is evident based on the previously mentioned studies. Equally important to reading success is metacognition. Metacognition is sometimes described as thinking about thinking. The metacognitive theory states that readers think as they read, knowing when to ask themselves questions, to pause and reflect, to go back and re-read, and how to generally regulate their reading process.

Flavell (1971) is credited with first defining and describing metacognition, and Flavell (1976) and Brown (1978) both wrote about students and their awareness of and use of metacognitive strategies in reading. Figure 2.4 below shows some of the elements and qualities of metacognition that will be explained in this section.

Figure 2.4

Metacognition



Student Awareness and Instruction

Durkin (1978) studied the traditional style of direct teacher instruction with guided reading and questions at the end and determined that this type of instruction is not beneficial to students because they cannot replicate this process when they are working independently.

Therefore, this determined that metacognitive strategies are needed in order to support students when they read independently.

Based on research, metacognition does not come naturally for every student. There is hope for those who do not instinctively understand metacognitive processes because they can be taught the steps of metacognition. Since metacognition is not visible, some students need extra support from teachers and modeling of this process in the form of think-alouds and other visible demonstrations in order to understand what it really means and how to use it.

Young and Ley (2000, 2002, 2005) did several studies with college students and determined that they do not know what they do not know. In other words, they may struggle in reading, but they do not know why, and they do not know what they are doing wrong. They may not understand that reading is an active, metacognitive process. Taraban et al. (2004) wrote that students need to use the reading skills learned in the younger grades and carry them through middle and high school into college. If the students never learned the skills that they needed, they cannot do this.

Proficient Readers

Duffy (2002) wrote that proficient readers use metacognitive strategies. In order to become proficient readers, students need to understand and practice metacognition. In a study by Allen and Hancock (2008), it was found that reading comprehension is directly related to metacognition. As the use of metacognitive strategies increases, so does reading comprehension. Also, metacognition skills tend to improve as students mature and with practice, so working on these skills and reading more can lead to improved reading comprehension.

Influence on Literacy and Language

Students who are not engaged or interested read less, and students who do not know how to use metacognitive strategies have trouble understanding longer texts. According to Allen and Hancock (2008), students who cannot effectively use metacognitive strategies are very unlikely to be successful readers and will likely struggle in school. For these reasons, teachers need to work to more effectively engage students in reading. They also need to model metacognitive strategies for students so that they know how to use these strategies and processes effectively. Engaged students who are using cognitive strategies and metacognitive processes as they read are more effective readers. They are able to be successful reading longer texts, which they encounter as they get to middle school, high school, and college.

Disciplinary Literacy

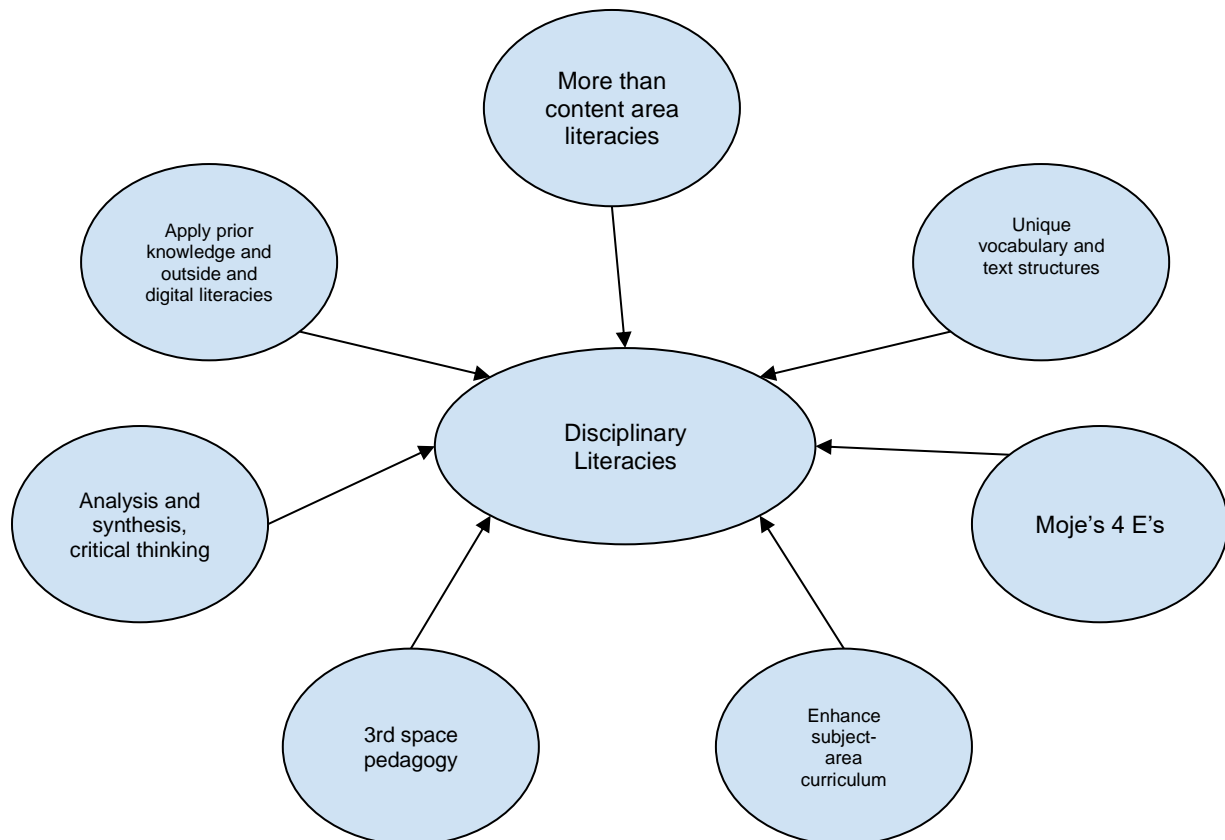
History: Content Area Literacy and Disciplinary Literacy

Engagement and metacognition are not the whole equation when it comes to college reading. Disciplinary literacies are very important at the college level, especially for success in various subject area classes. Disciplinary literacy stemmed from content area literacy. Content area reading has been around since (at least) the early 1980s. According to Moore et al. (1983), there were three groups of thought in regard to content area reading instruction. The humanists focused on the learning process, the developmentalists focused on learning as it related to each individual learner, and the scientific determinists focused on creating adequate testing for reading skills. The logic behind content area reading was that all subject areas include reading and that all teachers should also be teaching reading in some form. Teachers were expected to incorporate literacy and reading strategies in their content area curriculum. Figure 2.5 below

shows some of the qualities and characteristics of disciplinary literacies that will be discussed in this section.

Figure 2.5

Disciplinary Literacies



Development

Jumping ahead to 2004, Simpson et al. wrote about the need for disciplinary literacy since content area literacy did not effectively cover the needs of the content area classes. They explained that content area literacy simply applied general reading strategies to all subject areas,

but disciplinary literacy recognized that each discipline or subject area has its own unique vocabulary, text structure, and other nuances that make it different from other subject areas.

Complexity

Shanahan and Shanahan (2012) further explained the difference between content area literacy and disciplinary literacy. They explained the need for disciplinary literacy. Adding to the definitions of Simpson et al. (2004), Shanahan and Shanahan explained that each discipline has its own unique qualities that teachers should be able to share with their students. For example, SQ3R is a popular content area literacy strategy that can be applied to almost any subject area, but Greek and Latin roots would be a more specific tool that could be used in science class, since many scientific and medical terms are formed by Greek and Latin roots. Similarly, it would be important for history teachers to teach their students to consider the sources of documents that they read in history class. For example, an account of the same incident might be viewed differently from authors with different political views. The ability to consider the author of a historical document can lead to improved understanding of history, adding to a student's disciplinary literacy skills.

Current Research

There have been many studies done with disciplinary literacy strategies at both the high school and college levels. In 2014, Athanases and de Oliveira conducted a study with (mostly low-income level) high school students in California who were English language learners, mostly Latina/os. These students were taught to improve their disciplinary literacy skills in the area of history by learning to think like a historian. Scaffolding strategies were used so that the students could receive some assistance while applying their prior knowledge and outside literacies, including digital resources and knowledge about their own communities. They were

able to work across texts and analyze why many Latina/os in California do not vote. Through this collaborative process, students were able to better understand the disciplinary literacies in the area of social studies/history and better prepare themselves for learning in college.

A similar study with college students preceded this study. In 2004, Hynd et al. conducted a study in a college Learning to Learn class. Students in this class were also taught to think like a historian. They used a variety of texts representing similar periods of time and were asked to analyze and synthesize information in a form similar to a DBQ like those frequently used in AP history classes. This taught the students about the unique qualities of history as well as helping them to use their critical thinking skills.

A study in the area of college math was done in 2010. Helms and Helms used what they called note launchers in a college level math class in order to help guide students as they worked on math problems. These note launchers were basically study guides that helped students with the vocabulary and math process as they worked through problems. Students reportedly liked using the note launchers, and they felt that they helped them to better understand math.

Needs

Moje (2008) expressed that teachers need to learn more about their own disciplines to help students to develop disciplinary literacy skills. When content area literacy was used, many teachers felt that reading instruction that they had to do in their content areas was keeping them from achieving their goals for their subject areas. They did not think it was fair that they had to cover reading during their class time. It has been proven that disciplinary literacy skills can help students to be more successful in the specific discipline area, not just in reading. Therefore, teachers need to be taught how to identify the unique vocabulary, text structures, and reading strategies that pertain to their own area of expertise (or discipline). With this knowledge, they

how to carefully examine texts in order to get the information that they need. Finally, when students are able to evaluate text, they have achieved the critical thinking level of learning, which demonstrates their abilities to understand and apply their learning.

Instruction for Adolescent Learners

One way to transition from content area literacy to disciplinary literacy is to create a third space pedagogy as described by Hinchman and O'Brien (2019). They wrote about transition from an infusion (content area) model to a hybrid (disciplinary literacy) model. The hybrid model provided for a third space pedagogy by allowing students and teachers to work together in order to read and write in the discipline areas. The collaborative format is beneficial for adolescents and their learning because it allows them to utilize the social aspects of learning and it lets them bring in their digital and other outside literacies.

Another way to teach disciplinary literacy is to use Moje's four Es (2015). The four Es are as follows: (1) engage (2) elicit/engineer (3) examine, and (4) evaluate. Teachers should make an effort to engage students in the text by providing for interesting and relevant texts for authentic learning. They should also elicit or engineer the curriculum so that students can learn the vocabulary and other qualities that are unique to their subject area. Students should be taught how to carefully examine texts in order to get the information that they need. Finally, when students are able to evaluate text, they have achieved the critical thinking level of learning, which demonstrates their abilities to understand and apply their learning.

Professional development needs to take place in order to help teachers from middle school through college learn how to teach students disciplinary literacies. This reflects back to Moje (2008). These literacies are the key to success in secondary school and beyond. Teacher education programs and school district professional development programs should include

classes about instruction in disciplinary literacies. Teachers need to know not only what makes their discipline unique, but how to teach students to effectively read and write in their subject area. In addition, teachers should understand the studies of Alvermann and others who know how to effectively teach adolescents. Teachers of adolescents should use collaboration in order to help students activate and make connections from prior knowledge. They should allow students to use their digital literacy skills and their home and community resources to make their learning more effective, useful, and authentic.

Future Research

It could be interesting to follow the instructors from the Gregory and Bean study to see if they have continued teaching disciplinary literacies to their students. If so, are there students more successful in their subject area classes because of these disciplinary literacy skills?

Future research on the effectiveness of disciplinary literacy could include a study of students who have been taught how to use disciplinary literacies versus those who have not. It would be expected that those who have knowledge of disciplinary literacies would perform better when reading and writing for classes in those specific discipline areas.

It might also be interesting to conduct research in the form of interviews with secondary and post-secondary teachers to see if they (1) know what disciplinary literacy means, (2) know what literacies are unique to their own disciplines, and (3) teach disciplinary literacies to their students.

Conclusions

The lack of disciplinary literacies may be part of the reason that many high school students struggle when they get to college. Students are taught to read in elementary school, but they do not always learn how to navigate and learn from subject area texts. Students who have

not taken advanced-level courses, such as AP classes may not know how to read and analyze texts because they may not have been asked to do this in their high school English classes.

All teacher education programs could benefit from instruction on teaching in specific disciplines. Professional development should also be required to help teachers at the district level. If changes like these are made, high school graduates who know how to read and write about a variety of subject areas could be much better prepared for college and careers.

Many pieces must come together to form a proficient college reader. As referenced in Figure 2.1 at the beginning of this chapter, the theoretical focus of the study entails engagement with reading and text, the use of metacognitive strategies, and the understanding and application of disciplinary literacies. All three areas—engagement, metacognition, and the understanding of disciplinary literacies— are important factors in one’s ability to achieve the reading comprehension that is necessary to perform college reading tasks.

Summary

In this chapter, I provided a review of literature and a theoretical framework for the study. I explained constructivism and two constructivist theories, engagement theory and metacognitive theory, and how they play a role in reading comprehension and learning. I explained disciplinary literacies and their importance in college-level reading and how engagement, metacognition, and understanding of disciplinary literacies create increased reading comprehension and, therefore, more successful college readers. In the next chapter, I will explain the methodology for the study.

CHAPTER III

METHODOLOGY

In this chapter, I will explain the methodology for the study. This will include the processes and methods that were used to investigate the literacy experiences of college developmental readers, their use of reading comprehension processes and strategies, and their attitudes toward reading.

Methodology and Purpose of the Study

The purpose of this research study was to find out what literacy experiences can be found in college developmental readers, what reading comprehension processes and strategies they use regularly in their college courses, and what their attitudes are toward reading (see Figure 1.1). This information will be used to help bridge the gap between high school and college reading. As Moje wrote in 2008, secondary and postsecondary teachers need to work collaboratively in order to make this happen.

Research Design

Qualitative Case Study

This study is a qualitative case study with the characteristics described by Creswell and Poth (2018). It was conducted in a natural setting (a university), the researcher (I) was a key instrument collecting and analyzing data, multiple forms of data were used (surveys, interviews, a reading inventory, and artifacts), and triangulation took place. Complex reasoning, or a bottom-up approach to the identification of patterns and themes, was used in the research process by using test enrollment data as well as emerging themes based on the surveys, interviews, reading inventory, and artifacts from the participants (college developmental reading students). The participants brought different perspectives to the study; it included several students from one

course (developmental reading course), and it possessed the flexibility to emerge and shift throughout the process with myself as the researcher positioned in the study while trying to provide a holistic view of the experiences, perspectives, and strategies of the college developmental reader (Creswell & Poth, 2018). The cases were analyzed both individually and with a cross case analysis.

The study also followed the guidelines for a case study as described by Yin (2018), which include the scope and features of the case study. The scope included an in-depth study of a phenomenon (or case—the experiences, attitudes, and strategies of four college developmental readers) “in depth and within a real-world context” (Yin, 2018, p. 14). The features of the study included students enrolled (or recently enrolled) in a college developmental reading course with many variables of interest, including their educational characteristics, their reading comprehension strategies, and their attitudes toward reading. Prior research and theories were used in the study’s design and development, and it required data collection and analysis, and relied on multiple data sources including surveys, interviews, a reading inventory, artifacts, and triangulation of data (Yin, 2018).

The participants in this case study were enrolled in the same developmental reading course, but they came from many different backgrounds, so their reasons for being in the class and their perspectives were different. The surveys, interviews, reading inventory, artifacts, and field notes were used to get a thorough understanding of the educational experiences, the attitudes toward reading, and the reading comprehension strategies of college developmental readers in a university developmental reading class.

Researcher Positionality

As noted by Creswell and Poth (2018), the researcher is instrumental in qualitative research. For this reason, I will explain my background as an educator and researcher. I have been in the field of education for 30 years. I graduated from Wake Forest University in 1992 with a B.A. in English and my secondary teacher certification. Over the years, I have taught preschool through college level, but mostly middle and high school English and reading. I have also taught special education and students with dyslexia (MTA program). I recently directed Response to Intervention (RTI) for a middle school. I have taught in both public and private schools, but most of my classroom experiences have been in Title 1 schools.

While working as a teacher, I have observed many students continue to move up from grade to grade without a strong background in reading, and I have seen many of these students struggle across the board in all of their academic classes due to a lack of understanding and/or preparedness in the area of reading comprehension. I feel that my experiences as an educator give me a unique perspective on reading at all grade levels. I used this perspective and my experiences to find out more about why students are not being properly prepared for college-level reading during the K-12 grades. I hope this research will help to inform some positive changes in the teaching of reading and support for struggling readers in secondary school and at the college level.

Research Questions

The problem that was studied is the fact that some college students do not evidence the needed reading skills to meet expectations at the college level. The research questions are as follows: (1) How do developmental reading students recall and describe their literacy experiences, in and out of school?; (2) How do developmental reading students describe the

processes and strategies they use for comprehending text, and where did they learn these processes and strategies?; and (3) How do developmental reading students describe their attitudes toward reading, in and out of school?

Pilot Study

Description

I conducted a pilot study during the fall semester of 2019. In this pilot study, an 18-year-old college developmental reader at a Texas university was surveyed and interviewed, and she also provided artifacts of her work in a developmental reading class and was given an oral reading assessment. The following research questions guided the study:

(a) How does the student view herself as a reader?; (b) Does she use reading strategies when she reads?; (c) Does she like to read?; (d) Does she read for pleasure?; and (e) Does the student believe that her home and educational backgrounds have affected her reading skills? If so, how?

The participant in this study, Elsa (pseudonym), was placed in the developmental reading class based on her TSIA scores. She was 21 points short of the score that she needed to place out of the class. Her reading scores indicated that she needed the most help in main idea, supporting details, and the author's use of language.

Elsa was given the MARSI survey on the first and last days of the semester. She also completed the Interest Survey and the Reading Survey from *Teaching Reading: A Differentiated Approach* by Robb (2008). Elsa's surveys indicated that she likes to read, but she does not often read for pleasure because of the amount of reading required for her classes.

Elsa was given the Bader Reading and Language Inventory (2002). On the 11th/12th grade reading passage (highest level in the book), Elsa read a bit slowly but fluently. Her reading rate was 139 words per minute with only two errors, but her comprehension was only

about 30% correct. She was also interviewed about her family, education, and her reading choices. Elsa is a student who had recently moved to the United States from India who speaks three languages—Malayalam, Hindi, and English—and comes from a well-educated family. She prefers to read in her first language, Malayalam. Her goal is to become a cardiologist.

Elsa indicated that she regularly uses the MAPPS strategy (that was taught in her college developmental reading class) when she reads. The MAPPS strategy includes the following process:

M – Mark or annotate as you read in order to know these key ideas:

A – What is the reading **a**bout? Topic

P – What is the **p**oint of the reading? Main Idea

P – What is the **p**roof? Supporting (key) details

S – Summary = A+P+P or Topic + Main Idea + Key details.

Elsa often created graphic organizers to represent the content of her readings and made notes about various text structures and reading processes that she was using including activating prior knowledge, visualizing, and comprehension monitoring.

Findings

This case study resulted in the following findings: (1) Elsa did not know how to effectively use reading strategies prior to the developmental reading class. (2) Her oral reading fluency scores were on or near grade level, but her reading rate and comprehension were not. (3) She struggled with reading comprehension of many types of texts and with written responses to texts, but she had more trouble with the main idea and details than author's purpose and literary analysis. (4) Elsa liked some books, but she did not often read for pleasure. (5) She was not

confident in her reading skills—especially oral reading and comprehension because English is not her first language.

Elsa viewed herself as a good student, but she was not confident in her reading skills in English. She had heard about some reading strategies prior to the developmental reading class, but she did not know how to use them effectively. Throughout the semester, she learned and used new reading strategies, including MAPPS, creating graphic organizers, and identifying text structures. She was always an engaged student, but she did not know how to connect with and respond to different types of texts. The texts that she read in high school were not comparable to the texts that she was reading in college. She did not recall receiving instruction on how to annotate text and use self-regulation.

Elsa liked to read nonfiction books and magazines, but she did not often read for pleasure since she had so much required reading for her classes. She would rather watch television, or YouTube during her free time. She also could not find many books in Malayalam in the United States. (This is her first language and the language in which she preferred to read.)

Elsa believed that her parents had influenced her reading by encouraging her to read her entire life. They have had high expectations and big goals for her schooling and future career. She also believed that moving to the United States for most of her high school years and having to read and write more in English had a huge effect on her reading and writing skills. She recognized both the advantages and disadvantages in learning three languages and realized that her reading comprehension skills in English may be lower than others who have read and written English their entire lives.

Implications

The following implications have been made as a result of this case study: (1) Reading for high school and reading for college can be very different. The skills that Elsa needed to demonstrate success in high school reading were not the same as the analytical reading and writing that she was expected to do in college. (2) Students who may be considered to be proficient readers may still be placed in developmental reading, and they may not have the confidence, skills, and strategies that they need to be successful with college reading tasks. Although Elsa's oral reading was fluent and she was a very good student, she did not comprehend much of what she was reading. She did not know how to effectively use reading strategies to help her read proficiently prior to the developmental reading class. She was not confident in her skills because she had just moved to the United States for her last 2 years of high school. (3) Students may not read for pleasure because they do not have access to texts that they would like to read. Elsa grew up in a home where reading was expected and valued, but during the time of this study, she did not have access to any books in her preferred language, so she did not read texts outside of those required for school.

This pilot study gave me insight into the life of one college developmental reader. I wanted to learn more about the perspectives of college developmental readers. Thus, I proposed to select participants like her enrolled in a developmental reading class at a university in Texas as explained below.

Recruitment and Participants

Recruitment Process

Recruitment was a year-long process. Connections were made for potential recruitment sites prior to the Institutional Review Board (IRB) approval, and the active recruitment after IRB

approval took approximately 9 months. My initial incentive for the study participants was 4 free hours of tutoring and editing services.

I first attempted to recruit participants at Sunnyside Community College (SCC). I was referred there by a former university president who had previously worked with administrators there. SCC is a local college near my home. I was frequently communicating with the Director of Institutional Research there. I sent all of the requested information and filled out all of the required paperwork, including a research proposal, for the Institutional Research Department and was encouraged and told that someone would get back to me soon. After that, my contact stopped returning my phone calls and emails.

Next, I started trying to recruit participants from Bluebonnet University. I contacted all of the professors who teach the developmental class by phone and email, but only one responded. She posted information about my study on her course Canvas page. No potential participants responded.

Since I was not attracting any potential participants, I modified my IRB. I added an additional incentive of a \$25 Amazon gift card and also added new potential recruitment sites, including Eastern Carolina Community College (NC), College by the Bay (FL), Co-County State College (FL), and Western County College (TX). I also requested permission to post study information in the College Reading Instructors (CRI) newsletter with the hope of reaching college developmental reading instructors.

After the IRB modifications were approved, I contacted the professor at Bluebonnet University and she shared the additional incentive with her students, but still no participants were recruited. I also received permission from the President of Eastern Carolina Community College (NC) to recruit there. I was in contact with three instructors there who shared information about

my study with their students. One of them even shared my information with adjunct instructors and two different semesters of classes, but no participants volunteered. This instructor suggested that I raise the incentives with a larger amount for the Amazon gift card, stating that the students might respond for more money. I contacted the CRI group. The newsletter editor had previously told me that I could include a flyer about my study in their newsletter, but after I received IRB approval, she told me that I could not include my information in the newsletter, but I could post on their listserv instead, so I did that. The listserv reaches approximately 2,000 people, but I did not receive any responses from that post.

I also contacted Co-County State College, College by the Bay, and Western County College. Co-County State College was very encouraging, and the provost told me exactly what I needed to do to get approval from their research department. I started the process of completing their research proposal request.

Because I still had no potential participants, I decided to make another IRB modification. In this modification, I added a flyer that could be shared on social media and with friends and colleagues through email and text, I asked for permission to share the flyer and recruitment script on the Bluebonnet University listserv, and I changed the \$25 Amazon gift card to a \$50 Amazon gift card.

Once this second modification was approved, I contacted the professor at Bluebonnet University and the instructors at Eastern Carolina Community College to tell them that the Amazon gift card value had been changed to \$50. I still did not receive any potential participants through these schools. I added information about my study to Facebook, Twitter, and Instagram, and my advisor and other friends, colleagues, and relatives shared the information with potential participants, friends, and with colleagues at other universities. I also posted on the Bluebonnet

University listserv four times, since I finally started getting some responses from potential participants after my first post there.

I completed the process and received approval to recruit from Co-County State College. The Dean of the English department shared my flyer with her instructors and asked them to share it with their students, but I was not able to recruit any participants from there. Recruitment was a long and frustrating process, but eventually I was able to recruit four participants. The Bluebonnet University listserv was the key to finding the study participants (see Appendix A).

Sample

All students from a developmental reading course were invited to participate in the study within their course and through the university listserv. All students who responded to the study flyer resulted from the university listserv announcement. Eleven students responded to the Initial Exploratory Survey (see Appendix B). The Initial Exploratory Survey includes a few basic questions designed to help provide some basic information about the potential participants, including the types of classes taken in high school, the languages spoken and read, and career goals. After these surveys were completed, purposive sampling with the goal of maximum variation was used to find students to participate in two MARSII surveys and three personal interviews, read a passage from the Bader Reading and Language Inventory, and to provide artifacts and TSIA scores. Some of the students who completed the Initial Exploratory Survey did not qualify for the study and some did not follow through with the process. One signed the consent form but did not continue with the study. Ultimately, all study participants were recruited through the university listserv with one participant being referred by another participant (snowball sampling). The four students were selected with an effort to include a diverse group of participants coming from different educational backgrounds but allowing for a small enough

number of participants to get a thorough understanding of each individual. According to Patton (2015) purposive sampling can be used in order for the researcher to find participants who are representative of the population and useful to the topics being studied. An incentive of four free hours of tutoring and editing services (from the researcher) and a \$50 Amazon gift card was offered to encourage students to participate in the study.

Participants

The participants were first- and second-year college students ages 18-20 who were enrolled in the same developmental reading course. This age range was preferred so that the students would still be considered adolescents. Initially, only college freshmen were recruited, but sophomores were later welcomed due to a struggle to find participants. Three of the participants were students at Bluebonnet University and one a student at Texas Community College (but who had also taken other classes at Bluebonnet University). They were taking (or had recently taken) the Introduction to Writing class (ENG 1003), which is an integrated reading and writing developmental class. The age range of the participants was ages 18-20. Originally, freshmen only were being recruited, but there were not many responses, so the study was opened up to sophomores. Table 3.1 (below) shows details about the participants, including their class years, ages, which semester they took the English 1003 (developmental class), the location of the class, their racial identification and their languages spoken.

Table 3.1*Participants*

Participant	Daniela	Celeste	Brianna	Valerie
Class year	Freshman	Sophomore	Sophomore	Sophomore
Age	18	20	20	19
Semester ENG 1003	Spring 2022	Fall 2020	Fall 2020	Spring 2019
Location of class	Bluebonnet University	Bluebonnet University	Bluebonnet University	Texas Community College (dual enrollment)
Racial identification (as described by the participant)	Hispanic/Latinx	Hispanic/Latinx	African American	Hispanic
Languages spoken	English/Spanish	English/Spanish	English	English
	Wasn't "open" to learning Spanish until later (her father's language)	Considers herself bilingual Learning American Sign Language, Braille, and Vietnamese		Remembers hearing lots of Spanish as a child

Participants in this study were given an Introductory Exploratory Survey (see Appendix B), shared their TSIA scores, and took the MARSII by Mokhtari and Reichard (2002) at the beginning and the end of the study (see Appendix C), participated in three interviews (see Appendices D-F), read a passage from the Bader Reading and Language Inventory, and provided artifacts of their classwork.

Setting for the Study

For this study, I recruited students from Bluebonnet University in Texas. This university is a primarily women's university with several campuses and over 15,000 students. The educational programs at this university include liberal arts, sciences, health sciences, nursing, business, and education. They offer in-person classes and hybrid, and online courses and degree programs, and undergraduate, masters, and doctoral programs.

Bluebonnet University serves diverse populations. Recent data regarding freshman students indicates that 39% are Hispanic, 28% are White, 17% are Black or African American, and 12% are Asian, Native Hawaiian, or Pacific Islander.

Bluebonnet University offers developmental classes during the fall and spring semesters, with most sections of the course in the fall semester. The curriculum, department, and course name of these classes have changed in the last few years from a course called Fundamentals of College Reading and Learning (READ 1003) to a course called Introduction to Writing (ENG 1003), which is an integrated reading and writing class. Students who take the developmental classes at BBU are students who score below the desired score on TSIA and are determined to need extra assistance in reading and writing prior to enrolling in entry level English courses.

Data Collection

Multiple data sources were used in this qualitative case study. According to Yin (2018), using multiple data sources strengthens the study. Data was analyzed within (individuals) and across (all participants) the case.

The TSIA is a placement exam for high school students in Texas that determines college readiness and placement. The test covers reading, writing, and math skills. The reading section of the TSIA contains questions relating to both vocabulary and reading comprehension (Texas

Education Agency, 2022). The TSIA reading and writing scores were charted for all students participating in the study. The range of scores, and the sections passed and not passed were noted.

Metacognitive Awareness Strategies Inventory

All study participants took the MARS by Mokhtari and Reichard (2002) near the beginning and end of the study (see Appendix C). This survey asks questions about reading and reading strategies. Participants rated their answers on a scale of 1 to 5, with 1 meaning *never or almost never* and 5 meaning *always or almost always*. The surveys were scored and each of the three categories were totaled. These categories are global strategies, problem solving strategies, and support strategies. Each area was scored and rated as “high,” “medium,” or “low.” Global strategies are planned strategies such as previewing the text, reviewing tables and charts, and using context clues while reading. Problem-solving strategies are reading strategies such as re-reading text for clarity, visualizing information to help remember it, and trying to guess meanings of unknown words. Support strategies include paraphrasing, asking questions about the text, and taking notes while reading.

Interviews

I interviewed each participant three times. The first interview took place early in the study, the second one mid-study, and the third one near the end of the study. All interviews were conducted via Zoom. During the first interview, students were asked questions about their literacy experiences. The second interview included questions about the students’ use of reading processes and strategies. The third interview included questions about the students’ attitudes toward reading (see Appendices D-F). The interviews were semi-structured and followed the focused interview model by Merton et al. (1990). Mostly open-ended questions were used in

order to get the most thorough responses from participants. Merton et al.'s (1990) criteria for effective focused interviews were followed including range, specificity, depth, and personal context. Field notes were kept in order to include comments and impressions during and after the interviews. Interviews were audio recorded with the Rev app and transcribed using the Rev transcription service.

Reading Inventory

Participants were given a reading passage, *Weather and Climate* (11-12SB), from the *Bader Reading and Language Inventory* (Bader and Pearce, 2013). Reading fluency, rate, and reading comprehension were assessed in order to get a better understanding of the participants' oral reading skills and comprehension.

Artifacts

Participants were also asked to provide artifacts that demonstrated their use of reading strategies. These were artifacts from their developmental reading class or from their subject-area classes. Any evidence of the use of reading comprehension strategies was used as an artifact. For example, students were asked to show notations made on reading assignments such as marginal notes, any underlining or highlighting, or any papers that show or mention reading strategies. Notations and questions about the artifacts were listed in the field notes. Questions about artifacts were clarified during the second interview.

Data Analysis Procedures

All data was coded using descriptive coding (Saldaña 2016). Coding was done using NVivo. Seventy-eight codes were used to combine similar codes to create 47 codes. Using NVivo, a codebook chart was created with a list of the 47 codes and their meanings. The NVivo data was used to make an Excel spreadsheet (see Appendix G). Using NVivo, each of the 47

codes were grouped into four main categories: personal, literacy experiences, reading comprehension, and attitudes toward reading. The NVivo data was converted into an Excel spreadsheet showing the codes, number of references for each code, and the number of items coded (see Appendix H).

I answered the research questions using the data provided from all five sources. The five data sources—TSIA scores, MARSI, interviews, a reading inventory, and artifacts—were used to answer Research Question 1: How do developmental reading students recall and describe their literacy experiences, in and out of school? The MARSI, the interviews, reading inventory, and the artifacts were used to answer Question 2: How do developmental reading students describe the processes and strategies they use for comprehending text, and where did they learn these processes and strategies? The interviews were used to answer Question 3: How do developmental reading students describe their attitudes toward reading, in and out of school?

Some of the participants took the TSIA and others took the TSIA 2 (a newer version of the assessment). These scores were used as data for the study. The reading and writing assessment results were charted (as passing or not passing) from the TSIA/TSIA 2 (see Table 3.2). They were used to help answer Research Question 1 and were discussed in the first interview.

As evident in Table 3.2 below, Daniela and Brianna did not pass the reading portion of the TSIA/TSIA 2 and Celeste and Valerie did. Only Valerie passed the writing portion. All participants were placed into developmental classes. Valerie passed both reading and writing, but recalls being placed in a developmental dual enrollment (high school/college) class. As evidenced by the interview data regarding the assessment, Daniela and Celeste have negative feelings about the test; Brianna does not believe that it is a good indicator of her skills, and

Valerie believes that she was prepared for the test at the time but would not do as well on it if she had to retake it.

Table 3.2

TSI/TSIA Scores

Participant	Daniela	Celeste	Brianna	Valerie
Reading	10 points below passing	passed	20 points below passing	passed
Writing/Essay	1 point below passing on the essay	1 point below passing on the essay	3 points below passing on the essay	passed
Developmental Class	yes	yes	yes	yes
Interview Data regarding the Assessment	<p>Didn't "see the point" in this test</p> <p>Didn't retake the TSI due to the cost</p> <p>Knows that she can do better</p>	<p>Was very disappointed in her essay score and frustrated at being 1 point away from passing</p> <p>Said she was tired, and the test took over 2 hours</p>	<p>Felt like her skills (and how she tests) vary depending on how nervous she is about the test</p>	<p>Thinks her scores would be lower if she took the test today due to not taking many tests and feeling unprepared</p>

The MARSI was scored and numbers for all three categories—global strategies, problem-solving strategies, and support strategies—were noted for both the beginning and end of the

study administrations (see Table 3.3). As seen in Table 3.3, the participants rated themselves as having high use of global and problem-solving strategies and medium to high use of support strategies. The MARSI was used to help answer Research Questions 1 and 2 and was discussed in the second interview. The field notes regarding the MARSI are the researcher's explanations of the scores. The interview data includes the participants' comments and opinions regarding their test scores.

Table 3.3*MARSI Scores*

	MARSI 1 Daniela	MARSI 2 Daniela	Change	MARSI 1 Celeste	MARSI 2 Celeste	Change	MARSI 1 Brianna	MARSI 2 Brianna	Change	MARSI 1 Valerie	MARSI 2 Valerie	Change
Global Strategies	54 High	54 High	0	56 High	60 High	+4	56 High	53 High	-3	39 High	48 High	+9
Problem- Solving Strategies	38 High	37 High	-1	38 High	39 High	+1	38 High	36 High	-2	35 High	36 High	+1
Support Strategies	20 Med.	32 High	+12	36 High	29 Med.	-7	40 High	40 High	0	31 Med.	30 Med.	-1

Field Notes for MARSIScores: Daniela's increase in her support strategies score (medium to high and an increase in 12 points) indicates that she had increased her use of or awareness of her use of reading support strategies. Celeste's support strategies score dropped from high (36) to medium (29), which is a difference in 7 points. Perhaps Celeste realized that she was not using support strategies as much as she thought she was originally. Brianna's scores and Valerie's scores all stayed within the same category and did not change much. Valerie never rated herself as high in support strategies, but all other participants did on at least one of the surveys.

Interview 2 Data Regarding the MARSIScores: In Interview 2, all participants expressed that they benefited from the questions in the MARSISurvey. In Interview 2, Daniela predicted that her MARSIScores might change from the first survey to the second because she was able to "go back in time" to where she learned to "develop these strategies" and remind herself to use them. She was correct because her reading support strategies increased by 12 points. After taking the first MARSISurvey, Celeste realized that she was not using many strategies that she learned in elementary school, such as summarizing. "I used to do that, but now I hardly do that." Brianna described "checking in with" herself and predicted seeing progress in the use of her reading strategies over time through participating in the study. Valerie reported that she thought her second MARSISurvey might be "roughly the same," and it was. She also expressed that she thought some of the strategies that were asked about in the MARSISurvey were just "normal to do when reading," and she did not realize that these were things that were taught in school.

Each participant was asked to do three interviews. The topics of the interviews were as follows: (1) Literacy Experiences, (2) Reading Processes and Strategies, and (3) Attitudes Toward Reading. The lengths of all three interviews for each participant and field notes from the

interviews are indicated in Table 3.4 below. The field notes included in this table give important information about the participants, including my observations and comments made by the participants before and after the interviews, when they were not being recorded.

Table 3.4

Interviews

	Daniela	Celeste	Brianna	Valerie
Interview 1: Literacy Experiences/ Length	39:06	19:02	18:36	19:48
Interview 2: Reading Processes and Strategies/Length	21:31	17:11	14:01	18:17
Interview 3: Attitudes Toward Reading/Length	12:26	10:07	6:41	10:06
Field Notes	<p>Sophomore year of high school was a bad experience</p> <p>Mentions mental health issues and family problems regarding her dad</p> <p>Describes a “roller coaster” ride and “home troubles”</p> <p>Mother is a role model and support for her</p> <p>Has an on-campus job</p> <p>Rescheduled several of our appointments</p>	<p>Considers herself to be a “slow reader”</p> <p>Dad was an immigrant and dropped out of school in middle school Mom went to school later in life when she had a family</p> <p>Has some test anxiety</p> <p>Loves books and reads a lot</p> <p>Works full-time at a school assisting a blind student</p> <p>Earning her associate’s degree</p>	<p>Likes art and theater</p> <p>Education was important in her home</p> <p>Was in a pull-out and then a push-in program for reading and math</p> <p>Mentions reading lab, inclusion class, and a STAAR review class</p> <p>Speaks with confidence</p> <p>Credits theater experiences with helping her oral reading skills</p> <p>Loves teaching</p>	<p>Was in GT in the early grades</p> <p>Took Pre-AP, AP, and dual enrollment classes</p> <p>Graduated early with an associate degree and nursing certification</p> <p>Motivated to finish early because she “hates school”</p>

Daniela	Celeste	Brianna	Valerie
Seems to have a laid-back attitude	Bubbly personality and seems positive and confident	children Says this study brought her self-awareness	Positively influenced by teachers
Wants to be a social worker to help fix a “broken system”	Started at a 4-year university, transferred to a 2-year program, and is headed to another 4-year university	Has an on-campus job	Test anxiety with the STAAR
Likes to read and interest was sparked by Watt Pad	Knows herself well and has big goals	Seems to be a very positive person Wants to teach art in middle school	Parents divorced when she was in 2nd grade
Soft-spoken and maybe a bit shy	Wants to work with special needs students		Works at a golf course pro shop
Wants to work to improve her reading skills			Wants to be a nurse to help others

I coded the interviews using the open (or initial) coding method as described by Saldaña (2016). Initially, interviews were coded for attributes such as family influence on education, school experiences/classes taken, reading experiences, languages spoken, preparation for college reading, and career goals. Later, I grouped the attributes from the interviews into common patterns or themes. I used the interviews to answer all three research questions.

The reading inventory was used to gather information about reading rate, fluency, and comprehension. Table 3.5 below shows the participants’ oral reading rates, types of errors made, whether or not they self-corrected, their comprehension scores, and my field notes about their oral reading and comprehension. These results were discussed in the second interview. The field notes in Table 3.5 are the researcher’s explanation and analysis of the scores of the participants regarding their reading rate, oral reading fluency, and reading comprehension for the reading inventory.

Table 3.5*Reading Inventory*

Participant	Daniela	Celeste	Brianna	Valerie
Oral Reading Rate	135 wpm	133 wpm	110 wpm	136 wpm
Types of Errors	Mispronunciations and repetitions (did self-correct)	Additions, substitutions, and repetitions (did self-correct)	Additions, mispronunciations, substitutions, and omissions (no self-corrections)	Additions repetitions, and omissions (did self-correct)
Comprehension	59%	91%	68%	82%
Field Notes	Read orally at a slower pace than the average college student	Read orally at a slower pace than the average college student	Read orally at a slower pace than the average college student	Read orally at a slower pace than the average college student
	Caught mistakes and goes back to correct them	Paused some between phrases, not just at the end of sentences	Pace was a little off and there was some stuttering and backtracking	Lost her place and repeated words and phrases
	Had trouble breaking down multi-syllable words to get the correct pronunciation	Seemed to doubt herself (and even sang nervously once) when answering the questions	Had some trouble breaking down multi-syllable words Didn't self-correct much	Does self-correct
	Lost comprehension because she was focused on oral reading	Looked to me for validation and approval for some answers	Lost comprehension when focused on oral reading fluency	Repeats and adds words

The artifacts were work samples from the developmental reading class and/or core classes or other readings and notes. They were used to show evidence of the use of reading strategies. I looked for reading strategies that were being used by the participants and how they used them to comprehend text. Below are examples of two artifacts including Daniela's use of Cornell-style notes (see Figure 3.1) and Valerie's use of highlighting and annotations (see Figure 3.2).

Figure 3.1

Daniela's Artifact

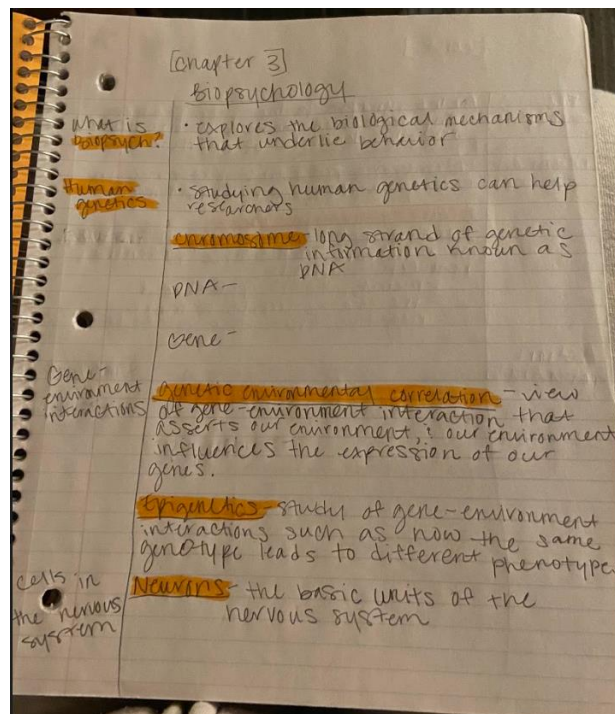


Figure 3.2

Valerie's Artifact

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A History of Women's Bodies

Rose Weitz

Throughout history, ideas about women's bodies have played a dramatic role in either challenging or reinforcing power relationships between men and women. We can therefore regard these ideas as political tools in an ongoing political struggle. This article presents a brief history of women's bodies, looking at how ideas about the female body have changed over time in western law and biological theory.

Beginning with the earliest written legal codes, and continuing nearly to the present day, the law typically has defined women's bodies as men's property. In ancient societies, women who were not slaves typically belonged to their fathers before marriage and to their husbands thereafter. For this reason, Babylonian law, for example, treated rape as a form of property damage, requiring a rapist to pay a fine to the husband or father of the raped woman, but nothing to the woman herself. Similarly, marriages in ancient societies typically were contracted between prospective husbands and prospective fathers-in-law, with the potential bride playing little if any role.

Women's legal status as property reflected the belief that women's bodies were inherently different from men's in ways that made women both defective and dangerous. This belief comes through clearly in the writings of Aristotle, whose ideas about women's bodies formed the basis for "scientific" discussion of this topic in the west from the fourth century b.c. through the eighteenth century (Martin 1987; Tuana 1993). Aristotle's biological theories centered around the concept of heat. According to Aristotle, only embryos that had sufficient heat could develop into

Handwritten annotations in yellow:

- WOMEN'S BODY / WOMEN'S OWNERSHIP
- WOMEN TREATED AS PROPERTY
- WOMEN'S NATURE IS INCORRECT SINCE IT IS WOMEN INSIDE THE BODY AS OPPOSED TO MEN'S THAT IS OUTSIDE "PART OF MEN"

Table 3.6 below shows the number of artifacts, the types of artifacts, the evidence of reading strategies used in the artifacts for each participant, and the interview data regarding the artifacts. Questions about the artifacts were asked in Interview 2.

Table 3.6

Artifacts

Participant	Daniela	Celeste	Brianna	Valerie
Number of Artifacts	4	6	3	4
Types of Artifacts	Notes from psychology and biopsychology and a study guide	Class notes, daily schedules and goals, math homework, and Bible study notes	Notes from history and science classes and notes made on reading passages	Notes on articles from gender studies class
Reading Strategies Evident	Cornell-type notes (questions out to the side), underlining, highlighting, and color-coding	Definitions, underlining, outlining, boxes for math answers, goals, itinerary, and task lists	Highlighting, underlining, annotations (summaries of paragraphs), and definitions	Highlighting, color-coding, and annotations (main ideas, descriptions, and how she relates to the text)
Interview Data regarding Artifacts	Daniela learned Cornell note taking in middle school and uses her class notes/PowerPoints to make Cornell-style notes to study for tests.	Celeste described how she summarizes her reading passages and uses highlighting to help her find sections of her notes and texts during quizzes.	Brianna recalled fifth grade and “highlighting the main parts in the paragraphs and then making little notes,” and she still uses this strategy taught by her fifth-grade teacher today.	Valerie described her notes this way: “I showed my reading strategies because I had a lot of annotations on them and putting down my own thoughts and my connections to the text as well as the words that I didn't know, writing out their definitions.”

Field notes were taken before, during, and after all of the other data collection. They were used to enhance the data and to write the participant narratives. Field notes for each data source and general field notes were taken throughout the study. They were organized in a Google folder for each participant. Field notes for each data source were included in each data collection table.

I analyzed all data—the TSIA, MARSI, interviews, reading inventories, artifacts, and the field notes—for common themes and patterns among them. This data was used to determine the literacy experiences of college developmental readers, their reading processes and strategies, and their attitudes toward reading.

Table 3.7 below shows the timeline for the research, including the IRB and modifications, the recruitment period, the data collection period, and the incentives used to attract participants. Each participant was given a \$50 Amazon gift card and four free hours of tutoring and editing services for participating in the study.

Table 3.7

Timeline

Description	Time frame
IRB at TWU	July 2021-September 2021
Modification 1	October 2021
Modification 2	November 2021-December 2021
Recruitment	September 2021-May 2022
Data Collection	January 2022-May 2022
Participant 1	January 2022-March 2022
Participant 2	March 2022-April 2022
Participant 3	April 2022-May 2022
Participant 4	May 2022-June 2022
Giving Back	January 2022-June 2022
<p>Tutoring and editing services were offered to students who fully participated in the study. Four hours of assistance were offered to compensate for the time spent doing surveys, interviews, the inventory, and providing artifacts. These were done over Zoom and through email.</p> <p>Each participant was also given a \$50 Amazon gift card.</p>	

Three of the participants utilized the tutoring or editing. One did not but said that she may need help during the fall semester. Table 3.8 below shows the number of hours of tutoring used by each participant, what type of tutoring was used, and field notes about the tutoring sessions.

Table 3.8

Tutoring

Participant	Daniela	Celeste	Brianna	Valerie
Number of Hours of Tutoring Used	1	1	0	2
Type of Tutoring	Asked for help editing a writing assignment and needed help with citations.	Asked for help with one paper, mostly citations and formatting.	Did not ask for any help, but she said that she might need some help during fall semester.	Asked for help with editing 2 sections of a 3- section paper.
Field Notes	<p>Didn't follow the rubric that well</p> <p>Grammar and punctuation were good</p> <p>Writing was coherent and interesting</p>	<p>Paper was organized</p> <p>Just needed help with citations and proper format</p>	Has not asked for tutoring help yet	<p>Tutored over Zoom</p> <p>Put a lot of thought into her writing</p> <p>Has strong feelings and opinions about her writing and what she includes in her paper</p> <p>Errors were mostly typos or mistakes made in a hurry</p>

Contribution to the Field

There have been many studies on developmental readers, there have not been many studies done that include the perspectives of the developmental readers themselves, according to Renmark (2019) who studied the role of literacy in developmental readers' lives. Connor (2013)

and Randel (2014) also suggested a lack of writings from the perspectives of college developmental readers. It is my hope that this study will change that since it included the perspectives of developmental readers. The design of this qualitative case study was such that participants could give a thorough picture of their academic background and reading history and strategies through multiple data sources including their test scores, surveys, interviews, and artifacts.

Another goal was to encourage collaboration among high school and college instructors in order to provide better instruction to meet the needs of students with the intention of sending better prepared high school graduates to college, so that they can be successful in reading across all subject areas. If more information is provided about the needs of college students in developmental reading, this can help instructors know what areas need to be improved.

CHAPTER IV

RESULTS

In this chapter, I will present information about all four participants in four individual narratives. These narratives will include the participants' literacy experiences in their early years and elementary school, secondary school, and college, their attitudes toward reading, and their reading comprehension skills from both the participants' and the researcher's perspectives. The narratives will be followed by a cross-case analysis of all participants.

Narratives

In order to better understand the results of this study, it is important to get to know the participants. They are four female participants from different backgrounds and different experiences and skills. Learning more about the participants will give the reader insights into the study and provide more context for the individual and cross-case analyses.

Daniela: A Future Social Worker

Daniela was 18 years old and a freshman at Bluebonnet University during the time of the study (spring semester 2022). She identifies as Hispanic/Latinx. She is soft-spoken and appeared to be shy at first, but she was very open to sharing her experiences with me during the interviews. Daniela was taking her developmental course during the time of the study and was the first participant to volunteer for the study. She was also working at a job on campus and had to reschedule and delay some of our meetings due to work conflicts.

In our conversations, Daniela mentioned family problems regarding her father, but views her mother as a great support to her. She described her home life as a "roller coaster" and referred to "mental health issues" as getting in the way of her successes sometimes. She mentioned that her mom was pregnant in her late teens, was a single mom for a long time, and

went back to school later in life. Daniela speaks both English and Spanish and admits that she was reluctant to learn Spanish—but learned it later—because it is her “father’s language.” She told me that she has always wanted to be famous, but she realized that is unrealistic. Her career goal is to become a social worker so that she can help others who may have been affected by a “broken system.”

Literacy Experiences

Early Years and Elementary School. Daniela remembers early literacy experiences with her mom and practicing writing on napkins and checking out books from the public library. She recalled that reading and writing were very important to her mom. She remembers having a love of reading at an early age and even taking books with her to the bathroom. She viewed her mom as a role model and her “number one supporter,” and she said that her mom always encouraged her to read.

Daniela recalled starting school with Head Start and how much she enjoyed school and learning her letters. She remembered feeling confident in her literacy skills in elementary school, and she loved school and her teachers. She remembered reading *Angelina Ballerina*. She experienced her first frustration with school in second grade when a teacher would not help her understand the answers to some reading questions and was yelling at her. Overall, she had good school and reading experiences and remembers having fun at school, even though she moved and changed schools in fifth grade.

Secondary School. Middle school was a time of transition for Daniela, and she remembers having some “mental health issues” and was confused by all of the changes that were taking place at once. She recalls middle school work as being easy and that she did well in school. She was “obsessed” with a book series on Wattpad, and this sparked her interest in

reading during this time; she would spend her free time reading. She described this as a time when she was very engaged in her reading.

Daniela went to two different high schools because she moved after her freshman year. She remembers taking Pre-AP English (but mostly regular-level classes) and having mostly positive experiences with school and teachers and feeling good about her reading experiences. She does recall using SparkNotes or Google instead of completing some of her reading assignments and forgetting to do some reading at home. She enjoyed classes where she was allowed to listen to audiobooks. She remembers reading *The Crucible*. She described chemistry as her hardest subject because it combines science and math, two subjects that are challenging to her.

College. Although Daniela's TSIA scores placed her in a developmental class, she feels that she is more developed than the TSIA indicated, and she said that she "doesn't need a computer" to tell her how she is doing. She scored 10 points lower than she needed on the reading section and 1 point lower than she needed on the writing (essay) section. She is confident that her reading and writing skills are better than the test indicated, and she did not want to retake the test because of the cost; she needed to save her money.

Daniela felt prepared for college reading because she considers reading and English to be among her "strongest subjects." She feels that college reading is more relevant to her career goals and that high school reading was mostly related to STAAR testing. She hoped to get "better in her reading and writing skills" during her developmental class. Daniela was happy with her developmental class and the help that she was receiving.

Attitude Toward Reading

Daniela likes to read and approaches most of her reading with enthusiasm. She enjoys reading spiritual books, blogs, self-help texts, and song lyrics (for song writing). She spoke about this in our third interview:

Daniela: I like to read anything from books to blogs. What else? Magazines, textbooks.

Researcher: You like to read your textbooks?

Daniela: Yeah. Yes and no, I guess, I don't know. Because they're from my classes, I'm less likely to read them, But yeah, I do read them.

Researcher: And do you prefer books or other forms of media when you're reading?

Would you rather read a book, or would you rather read online?

Daniela: Honestly, it doesn't really matter to me. I feel like reading a book is better for your eyes. Whereas you know, looking on a screen, it drains your eyes, and you get more tired.

Researcher: Right. What kinds of things do you read outside of school, like things that aren't for class. It could be at home, church, wherever.

Daniela: So, I read books for me like spiritual books, and self- help books. I am not sure if song writing counts.

Daniela considers herself to be a proficient reader, and she said, “I feel like I read faster than an average person.” She stated that she feels confident reading in all disciplines.

The developmental class helped Daniela to “refresh her skills” in reading and writing and reminded her what she had already learned. At first, she did not like working with the software that was used in the class, but she learned to use it. Participating in the study “shed light on how I’ve grown,” according to Daniela, and it also taught her what she can do to improve her skills.

Reading Comprehension

Comprehension Strategies (Participant's Perspective). Daniela gives her mother most of the credit for teaching her reading skills and strategies and states that her mother was always very patient in answering all of her questions and would also read to her and quiz her on words and books. Daniela also recalls going back to correct her work and re-reading text to get meaning for most of her school years. She had the desire and the motivation to want to do well.

Daniela considers herself an engaged reader, and—when she has time—she reads passages carefully, making notes out to the side of each paragraph and summarizing what she has read. She admits that there are times when she is cramming for a test and does not read and make notes with as much detail.

She said that she answered the MARSI questions truthfully and does not always think about how she uses these types of reading strategies. She was interested in seeing her results to see “how developed” she was. She found that she was going “back in time” as she took the assessment because it helped her to remember things that she had learned in the past. According to Daniela’s MARSI scores, she uses a high amount of global and problem-solving reading strategies, and a medium (then later high) amount of support strategies. She rated herself 12 points higher in support strategies during the second administration of the MARSI, suggesting that she thinks that these skills have improved from the beginning of the study or that she is more aware of her use of support strategies.

Ever since she learned the Cornell Notetaking Method in school, she has used it for her class notes. She looks back over PowerPoints from her classes and makes her own Cornell-style notes to help her study. She organizes her notes and writes out questions and definitions (see Figure 3.1).

In addition to using Cornell notes, Daniela reads difficult passages paragraph by paragraph and uses context clues while reading. As for help with writing, she said that peer editing helps her to be a better writer. Although Daniela said that she has never heard the word metacognition, she describes her use of it by saying the following:

Whenever I'm reading, I basically visualize what's happening in the text in my head. I guess that you can call that a strategy because it helps me understand it more. And whenever I'm answering questions... basically (I guess) what will happen next.

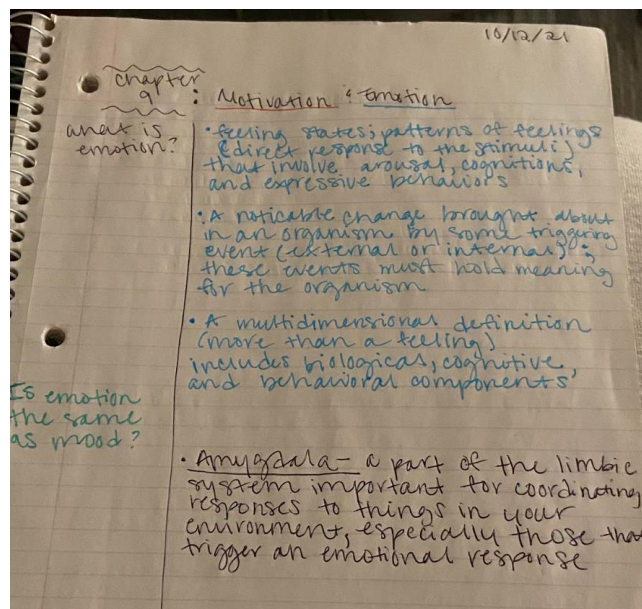
Daniela does not remember learning any strategies that were specifically for a content area or discipline, but she believes that a career as a social worker would include the disciplinary literacies of filling out lots of forms and that it will be important for her to read and write well for this career. “Because whenever you're dealing with government documents, you have to be really careful with that. Because you don't want to go to jail.”

Comprehension Strategies (Researcher’s Interpretations and Field Notes). Daniela’s reading passage scores indicated that she read orally at a rate of 135 words per minute, which is slower than the average college student’s rate. She had some mispronunciations (“admistration” for administration and “meterlogical” for meteorological), a repetition (says “the notion” twice in a row), and a self-correction (“differentiate”). She had difficulties breaking down multi-syllable words as noted in the mispronunciations and self-correction above. Her comprehension score was 59% meaning that she answered 59% of the questions about the reading passage correctly. Her comprehension seemed to be lacking due to her focus on pronouncing words for her oral reading, but she indicated that she felt confident during the oral reading but was nervous during the questions.

The artifacts that Daniela provided were notes from psychology, biopsychology, and a study guide. She provided four artifacts (see Figure 3.1 and Figure 4.1 below) and demonstrated her use of Cornell notes by writing questions out to the side of her notes. She also underlined, highlighted, and color-coded her notes.

Figure 4.1

Daniela's Artifact 2



After analyzing her scores, I believe that Daniela could benefit from the use of more strategies to help improve her comprehension skills. I think she could benefit from some word attack skills to help her break down multi-syllable words. She also mentioned summarizing and writing out notes as she reads, but her artifacts showed little evidence of that. However, she writes questions out to the side and includes definitions in her notes, illustrating the use of some comprehension strategies.

Celeste: A Future Special Education Teacher

Celeste is 20 years old and a sophomore in college. She attended Bluebonnet University and then returned home to a local college. She took her developmental class during the fall of 2020. She identifies as Hispanic/Latinx. She has a bubbly personality, and she considers herself bilingual because she is fluent in both English and Spanish. Celeste learned Spanish first and then started learning English when she was in first grade. She is also learning American Sign Language (ASL), Braille, and Vietnamese on her own. She is learning ASL and Braille because she works with a student who is blind, and she is learning Vietnamese because it is a commonly used language in the area where she lives. In addition to being a full-time college student, Celeste works a full-time job at a public school as an assistant to a student who is blind. Even though her schedule was very busy, Celeste was always on time and reliable for our appointments.

Celeste's major at the time of the study was The Art of Teaching, but she was changing her major to Rehabilitation (with a focus on orientation and mobility). She described her new major and career goals in our third interview:

I am going to be an orientation and mobility and visual impairment specialist. That's two certifications. Both are going to require me to be able to assist people who are visually impaired. So visual impairment, they help with education stuff, so teaching them braille, teaching them how to use an abacus, teaching them how to use a slate and stylus, teaching them how to fold money and things like that. And then orientation, mobility. They help with just feeling their surroundings, seeing how to use their resources to be comfortable with their surroundings, teaching them how to use their cane, teaching them

how to switch out their cane, how to fold their canes, use their canes. Just really teaching them how to navigate the world physically.

She predicts that using Braille will be a disciplinary literacy for her in her major and in her future career, since she will continue to work with individuals who are blind. Since she speaks both Spanish and English, she wants to be able to communicate well with both English and Spanish-speaking parents and students, and she wants to continue to learn Braille to better communicate with her students who are blind.

Literacy Experiences

Early Years and Elementary School. Celeste told me that education was always valued in her home because her father was an immigrant and dropped out of school in middle school, so he pushed her to continue. Her mother has a bachelor's degree that she earned when she had two kids under the age of 5. Celeste refers to her mom as "a real boss" because she was able to earn her degree while having a family.

A big book of Disney stories was a favorite of Celeste's when she was young. She remembers that her mom would read her two stories from the book each night. The Disney book was written in English (as were most of her books), but she also read books in Spanish as a child. By kindergarten, she was reading chapter books on her own (in English). She loved *Junie B. Jones*, and later graduated to the *Harry Potter* series. Celeste's writing was mostly in Spanish until second grade, and all of her formal education was in English until she took Spanish classes in middle school.

Celeste went to two different elementary schools, one for kindergarten through fourth grades, and another for fifth grade. After kindergarten, she was offered the opportunity to move up to second grade, but her mother would not allow that. She remembers being very frustrated

with the librarian at her school regarding her Accelerated Reader levels. Accelerated Reader is a program that provides multiple choice reading comprehension tests on books that are divided into reading levels. Celeste recalls reading books well above grade level, but she always considered herself a “slow” reader. “Every week I wasn’t taking a test, she [the librarian] would push me down a grade level.” She remembers being lowered to a kindergarten level book as a fourth or fifth grader. This was very upsetting for her. Her mother ended up writing a letter to the librarian.

She remembers learning “phonetics” (as she described it) in elementary school and she did not like that much. She did like writing, and she remembers writing an essay comparing her mom to Word Girl because her mom was like a superhero to her. She recalls that her essays did not have many suggested changes when the class did peer editing, so she felt good about her writing skills.

Secondary School. Celeste went to a private middle school that was a college preparatory academy. All instruction (except for Spanish classes) was in English. It had an engineering focus, so she remembers classes in reading, writing, and robotics. She was there all but one semester. She spent one semester at another school.

The high school years were spent at the same school all four years. She took mostly regular-level classes but did take AP English 3, AP Physics, and AP Spanish 3 and 4. She found Spanish to be the most challenging class because “a lot of people don’t realize that proper Spanish is completely different from Spanish.” She also took some dual credit classes. She remembers that her senior year English teacher connected stories that they read to real-life, and that made things more interesting for her and helped her better understand what she was reading.

College. Celeste's TSIA scores placed her in the college developmental class. She passed the reading section, but she scored one point below the required score on her essay. She was very disappointed that she missed passing by one point. Regarding her test scores, she said, "Oh, my God, I'm one point away for everything." She recalls pressure to finish things in her school years and "There was a lot of pressure to rush through things. And I think that's what messed me up with my TSI, is I was trying to get out of there as quickly as possible." She also mentioned that the test was over 2 hours long and that she was getting very tired.

Celeste said that she felt prepared for college reading in the sense that she had lots of experience reading chapters and answering questions. She said that she uses Cornell notes for subject area classes and includes questions, summaries and titles for her class notes; she learned this note taking strategy in high school. Her most challenging subjects in college are Biology and Geology. In reference to these classes, Celeste said the following:

I feel like those are a lot harder because they rely on you mostly to read as much as you can. And because I'm a slow reader, it became a little difficult for me to catch up on the chapter readings and stuff.

Celeste entered her college developmental class hoping to learn to better develop her essays. This class was held online during the fall of 2020, so COVID-19 protocols were in place, and there was no in-person class. She felt like her professor did a great job of helping everyone individually and, in her opinion, she received lots of great feedback on her writing from her professor and from other students. She described the class and professor's assistance in our third interview:

What I learned in the developmental reading class, because that class was really small, I had a lot of one-on-one interaction with the professor. He taught me to not be so detail-

oriented because when you're younger you're taught that your stories have to be detailed. You have to go into colors and senses and smells and all that. I would overdo it and I didn't realize that I was overdoing it. He also taught me how to better use punctuation. I was struggling very hard with commas and semicolons. That was something that I hated using, did not like using it. I will end a sentence before I put a comma in it, because I'm just like, "I don't know where to put them." I couldn't put them anywhere. He also taught me where to put them, how to put them in the sentence, and how to form sentences following that. And I really appreciated that because I was like, "I've really gone my whole life with not knowing how to use commas like that."

Attitude Toward Reading

Celeste remembers reading Wattpad stories when she was younger. She read Wattpad stories in both Spanish and English. She liked many of the Spanish novels better because they had "more drama." Celeste considers herself "a big reader." She described her love of reading in her third interview:

I love to read. I've recently got back into like Wattpad reading, which is an app where people can write their own stories and stuff. I recently got back into doing that because I like physical books, but I like stories that are short. And I can't really find a lot of short story books, unless they're multiple stories in one book. But yeah, I really like reading; reading is a good hobby to have.

When asked what she likes to read with Wattpad, she said the following:

I like sci-fi. I like fantasy. I like thriller. I like paranormal romance. I like anything really. Just as long as it doesn't have a lengthy intro. Lengthy intros is what kills my whole vibe

with the book. So if the intro and introduction of characters is really long, I'm not reading it.

Reading Comprehension

Comprehension Strategies (Participant's Perspective). Celeste loves to read and considers herself to be a “slow” but engaged reader. “I am always engaged in my reading. I love to read.” She told me that she enjoys “veering into a person’s mind and understanding how they work, how they feel, how they function...” and she can do this by reading.

Celeste told me that she uses Cornell notes regularly in her college classes. Other reading strategies that she says she uses are alternating oral and silent reading (which she learned in elementary school) and reading the questions at the end of the text first (which she learned in high school). She has a specific strategy for approaching challenging text.

I try to read it over again if I don’t understand. And if I don’t understand, even after that, I’ll just keep going to see if it continues to tie together the further I go along. I also like to underline where I had a little difficulty. So, in case a teacher is around or if someone else is around, I can ask them and be like,” Hey, do you understand this?

Celeste described taking the MARSII as a time to “revisit” her reading strategies. The questions asked helped her to remember some strategies that she used in the past and she realized that she had not been using them. It helped her to reflect back on some skills and strategies that she had previously learned.

According to Celeste’s MARSII scores, she uses a high amount of global and problem-solving reading strategies (such as previewing the text and guessing the meanings of unknown words) and a high—then later medium—amount of support strategies (such as taking notes and underlining important ideas as she reads). She rated herself 7 points lower in support strategies

during the second administration of the MARSI, suggesting that she may not think her support skills are as good as she first thought they were.

She told me that she was nervous with the oral reading portion of the reading inventory, and she pictured that I was not there to make herself less nervous. She expressed concern that her reading was “too slow,” and was surprised at how well she did on the comprehension portion of the test.

Celeste told me that she does not know what metacognition means, but she described “reading in her head” in her second interview and how the “reading in her head” is more effective for her than oral reading.

Comprehension Strategies (Researcher’s Interpretations and Field Notes). Celeste’s reading passage scores indicated that she read orally at a rate of 133 words per minute, which is slower than the average college student’s rate. She had an addition (“the”), a substitution (“for” in the place of “from”), and a repetition (“high”), and she did self-correct (“pollutants”). The pacing of her oral reading was inconsistent, and she slowed down quite a bit during the second paragraph of the passage, then sped up again in the third paragraph. She paused between phrases, not just at the end of sentences. Her comprehension score was 91% meaning that she answered 91% of the questions about the reading passage correctly, although she did not seem confident as she was answering questions, and she looked at me for approval regarding her answers. She even sang nervously once while she was answering a question.

The artifacts that Celeste provided were notes from daily schedules and goals, math homework, Bible study (see Figure 4.2) and U.S. History and Biology classes (see Figure 4.3), Definitions, underlining, outlining, boxing math answers, goals, itineraries, examples, and task lists were evident in Celeste’s notes.

Figure 4.2

Celeste's Artifact 1: Bible Study Notes

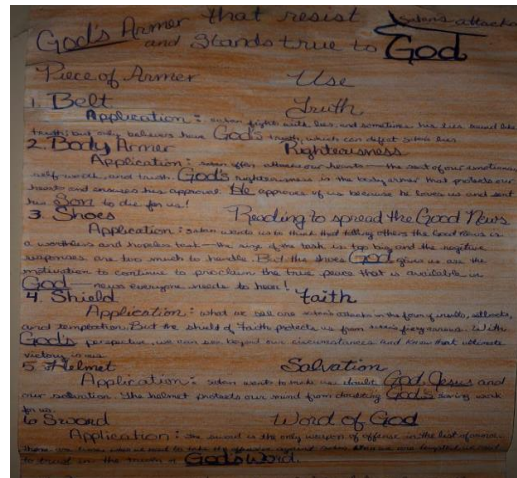
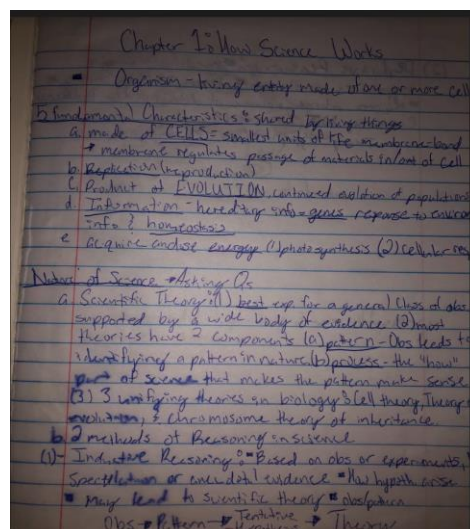


Figure 4.3

Celeste's Artifact 2: Science Notes



Overall, I would say that Celeste could benefit most from working to improve her confidence in her reading abilities. She described herself—several times—as a “slow” reader. This thought seems to stem back to her elementary school days and the Accelerated Reader tests. She could likely benefit from learning some disciplinary literacies (such as how to read science texts and tips for learning scientific terms) and by working on her comprehension support strategies (such as paraphrasing and making marginal notes and annotations), since there was very little evidence of these in the artifacts that she provided. Working on these types of skills might also help to improve her confidence in reading.

Brianna: A Future Art Teacher

Brianna is 20 years old and a sophomore in college. She attends Bluebonnet University. She took her developmental class during the fall of 2020. She identifies as African American. She has a warm and friendly personality. In addition to being a full-time college student, Brianna has a part-time job on campus. She was always on time for her appointments with me and very pleasant to work with.

Brianna’s major is art education. She told me that her art teacher that she had during her senior year of high school and her own experiences with art influenced her to choose this path:

I had an art teacher my senior year and in the class I was in, it was called Partners Art.

So it was basically helping special needs kids create art. And I was just like, "I love this."

And I've always been interested in art for a very long time. And I also worked at

Michael's, and I did kids events on the weekends.

Brianna wants to be a middle school art teacher and seems very passionate about becoming a teacher. In addition to art, she likes theater, and her theater background is evident when she speaks. She enunciates clearly and speaks with confidence.

Literacy Experiences

Early Years and Elementary School. Brianna described her early childhood days and said that reading and education were valued in her home. She said that through all of her school years, education continued to be a priority:

My parents are serious about education. That was the main thing. That was their focus. I mean, it was a main priority. So, they always wanted to check our report cards, and that's, for instance, elementary. Elementary is not, I guess, as strict as the other grades above, but they wanted to see them. So, they were super strict on that, but they always rewarded us when needed, but there were times that we did experience obstacles through school, but we worked through it. We had school meetings. Our parents were there at all of them meetings.

Brianna's family speaks English only and she didn't learn any other languages until she took Spanish in high school. Brianna told me that she moved—due to her dad's job— from Missouri to Texas during her elementary school years. She attended fourth and fifth grades in Texas and describes her reading classroom there:

And I was in there with a couple of other students, and we just kind of did all these different kind of reading strategies. We did a thing on the computer called I Station. We worked with that. We also did some short answer responses. We all also did kind of days that we would read through passages and highlight and just kind of work on our reading skills.

Brianna remembered that fourth grade was when she started feeling pressure from the STAAR testing (the statewide testing done in Texas). She recalled forgetting things that she knew because of the stress of the STAAR tests. Brianna recalled reading leveled readers in

elementary school and graduating to “chapter books” in middle school. She enjoyed the *Twilight* series during her middle school years.

Secondary School. Since she enjoyed reading longer books in middle and high school, her parents made sure that she had plenty to read:

My mom and my dad always made sure we had some type of books around. We would go to Barnes and Noble on the weekends, pick out some books for us to read, just to kind of help with our vocabulary, and because they knew that we kind of struggled in those areas. So, they just tried to improve those as much as you possibly could.

Brianna told me that she was in a pull-out classroom in middle school for math support. She did not feel that she needed the reading support by the time she reached high school and was taking regular-level English classes, so she spoke up for herself and said, “I just don't think I no longer need this.” She said that they still helped her in the areas where she felt like she was lacking a bit. She describes her high school years this way:

I was really independent when I got to high school. When it came to reading, my freshman year of high school, I was in another reading class just to make sure I was at the right level with everyone else, but that was my last reading class, my freshman year of high school, and that was pretty much it.

An inclusion teacher was available to help in Brianna’s high school classroom. She did not always want the help and she cannot remember if she had an Individualized Education Plan (IEP), 504, or RTI plan, but she remembers that there was “something” that was monitoring her progress. She remembers “readers’ theater” as being something that she really enjoyed in her secondary school years, stating that it made reading fun.

College. Brianna's TSIA scores placed her in the college developmental class. She scored 20 points below the required score in reading and 3 points below the score that she needed to pass the essay. She mentioned that she "feels like her skills (and how she tests) vary depending on how nervous she is about the test."

Brianna felt prepared for college reading and credits both her parents and teachers for preparing her. "I was noticing it my freshman year. I was like, "Well, this is kind of similar to what we did my senior year," so it was not too drastic (of a change). Her developmental class was paired with an English class and she found that to be helpful. She said that her developmental teacher was "really great" and that the classes coordinated well. She describes math as her most challenging college class.

Attitude Toward Reading

Brianna likes to read "a lot" and told me that, "the more and more you read, the more your vocabulary expands." She likes to read *The New York Times* and especially enjoys reading online museum pages about various art museums. She does see that she has room for improvement:

The reading skills I feel like I need to improve is just going outside the box and reading different things. So I would say like kind of getting out of the same category or topic that I like to read. So reading something that's maybe more educational or reading something that's more relating to some other topic, something like that.

Reading Comprehension

Comprehension Strategies (Participant's Perspective). Brianna feels that her abilities are better than what her TSIA scores indicate. She describes her placement in developmental reading:

So I was in this development reading class because my TSI scores were not college ready yet. So I was placed in this class to improve my development in writing, reading, and I hope to learn more strategies so I can prepare myself to be college ready.

Brianna has a positive outlook on her class even though she thinks that test anxiety played a factor in her test scores. Regarding her TSIA scores, she said the following:

I feel like some days you could be really prepared and ready, and then some days I feel like your nerves really get you. And so you might not perform the best. So I feel like I could have performed better if I retook it, but I just went on with the opportunity of just taking another reading development class.

Brianna felt comfortable reading aloud for the reading passage. She is a theater student and has a lot of practice with oral reading. As for her artifacts, she told me that she uses highlighting to emphasize ideas in her notes. She learned this in fifth grade and has used it very since.

When asked about metacognition in the second interview, Brianna told me that she had heard of the word, but she could not remember what it meant. As for the MARSI, Brianna said that she felt very comfortable with it because she has evaluated her reading skills herself over the years. According to Brianna's MARSI scores, she uses a high amount of global (evaluating the text, having a purpose for reading), problem-solving (re-reading and paying close attention to difficult text), and support strategies (reading aloud, asking questions about the text). The second administration of her survey varied very little from her first.

Comprehension Strategies (Researcher's Interpretations and Field Notes). Brianna's reading passage scores indicated that she read orally at a rate of 110 words per minute which is well below the average college student's rate. She had some additions (small words like "the"

and “was”), mispronunciations (“micrological” for meteorological and couldn’t figure out how to pronounce “differentiate” and “fluctuate”), substitutions (mostly endings like “-ed” for “ing”), and omissions (small words or single letters), but no self-corrections. Her pace was inconsistent, and she did some stuttering and backtracking as she read. She had difficulty breaking down multi-syllable words. She seemed to lose comprehension because she was focused on fluency. Her comprehension score was 68% meaning that she answered 68% of the questions about the reading passage correctly.

Brianna provided three artifacts; they were notes from history and science classes and notes made on reading passages. As seen in Figure 4.3 and 4.4 below, Brianna’s artifacts showed evidence of highlighting, underlining, definitions, and side annotations (with paragraph summaries).

Figure 4.4

Brianna’s Artifact 1: History Notes

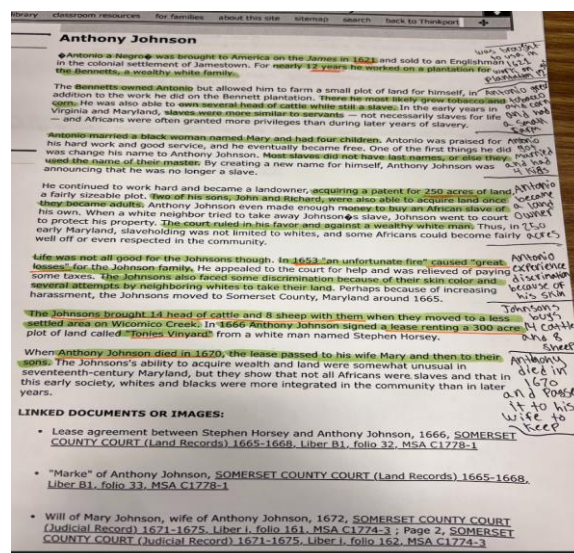
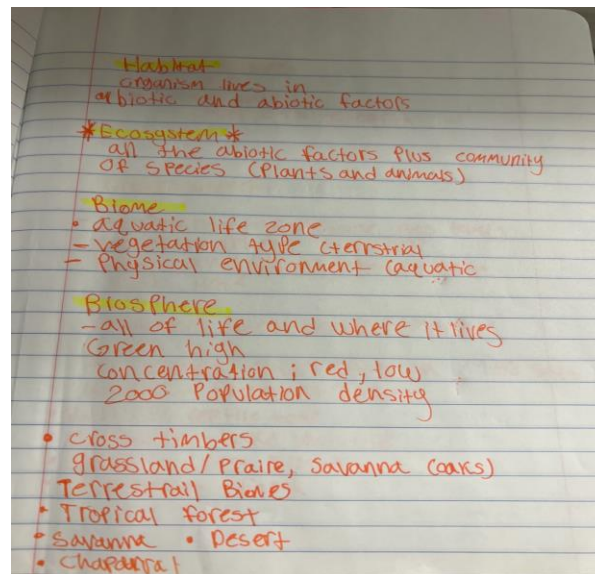


Figure 4.5

Brianna's Artifact 2: Science Notes



Overall, the data suggests that Brianna could benefit most from working on some word attack skills, specifically learning how to break down multi-syllable words. This would help both her fluency and her comprehension. She could also use some help with learning to cope with test anxiety. According to Brianna, how she feels seems to really affect her testing.

Valerie: A Future Nurse

At the time of the study, Valerie was 19 years old and a sophomore. She identifies as Hispanic. She has a cheerful and outgoing personality. She took her developmental class in a dual enrollment program at Texas Community College. In addition to being a full-time student, Valerie works in a golf course pro shop in sales and also helps to manage tournaments and other events.

Valerie considers herself only an English speaker, but she does recall hearing lots of Spanish at home when she was a young child:

My biological father was Hispanic, born and raised in Mexico. So I was around Spanish a lot. But after my parents got divorced, I wasn't there as much. So, I can't fluently speak it, but I can understand it and I still have that a part of me, if that makes sense.

Literacy Experiences

Early Years and Elementary School. Valerie remembers her aunt as being “a library nerd” and a huge influence on her interest in reading. Her aunt worked in a library and would get books for her to read. She would also video chat with her to talk about the books that she read. She also remembers reading books and magazines with her aunt when she was younger.

Valerie attended kindergarten through fifth grade at the same school. She began the gifted and talented program in second grade. She enjoyed the advanced work and the special projects. She was able to learn some Chinese in fourth and fifth grade. She remembers taking literacy tests in elementary school to determine her reading levels, and said that, “At that point [in elementary school], I had really good reading comprehension and word fluency.”

Secondary School. Sixth grade brought a within-state move halfway through the school year. When she moved, she found herself to be ahead of the rest of her classmates because the curriculum was different. Valerie took Spanish classes when she was in middle school and received high school credit for them. She took all Pre-AP classes in middle school and ended up being able to graduate from high school a year early.

In middle school, Valerie “did not like English and writing very much. I struggled with it.” However, she told me that her middle school English teacher created a nice environment for reading and it encouraged her to read, even though she didn't like to read at the time:

They had string lights around the room....their classrooms faced the outside of the building, so we got a lot of sunlight in there. She has a couch and some bean bag chairs

and everything. She let us read whenever. We spent the first 15 minutes of class reading every day...I didn't like reading, but she provided such a comfortable space for us that I wanted to.

She only took one AP class in high school—Human Geography. All of the rest of her high school classes were Pre-AP. She took dual enrollment classes in high school and online, and was in National Honor Society, was on the school dance team, and was a certified nurse at high school graduation.

Valerie remembers reading *A Midsummer Night's Dream* (said she “absolutely hated it”) and *The Giver* in high school. She remembers some reading instruction in middle school and high school and with emphasis on understanding text, taking notes, and summarizing.

Valerie graduated from high school a year early. “I do not like school. That was part of the reason why I graduated early.” She also noted that she will graduate from college early if she can. Although Valerie did not like school, she spoke about many influential teachers throughout her school years. She always seemed to have a teacher as a close support person throughout her school years. She described a teacher and student teacher in elementary school who supported her the year that her parents got divorced and treated her “as if I was their own daughter” and another one in middle school who did the same. She describes some of her high school teachers as being “like my mom” or “like my dad,” and she always felt that she had a teacher or two to support her both with school and personal issues.

College. Valerie's TSIA scores would not have placed her in a developmental class at Bluebonnet University. She said that she was placed there because of a state requirement and that she probably would not have taken it if it was not required. Her class was taken in high school through a dual enrollment program. She passed the TSIA in both reading and writing, but she is

not confident in her skills and believes that her scores would be lower if she took the test today (due to not taking any tests and feeling “unprepared.”) I asked Valerie if she felt prepared for college, and she said the following:

To some degree, yes. To some degree, no. And it’s not something that I blame my teachers for whatsoever. I think it’s just the education system. We were not taught reading comprehension. We were taught to a test. Read this passage, answer the questions about it. That’s it. But the questions, I never felt, were extremely deep to make me have to read the entire thing and understand it. I could skim through and answer the questions. Now that I’m in college, this semester in particular, three of my classes are discussion board-based. So I have to read a chapter of my book and write a discussion board on it. I have never struggled so hard in my life than what I am right now because I wasn’t taught...I mean, I was taught, but it (comprehension) wasn’t taught as much as passing a test was. So I didn’t learn the different skills to completely dive into something and write a full 300-word summary about it.

She went on to tell me that her college assignments are not that similar to her high school assignments and that her Microbiology and her Gender and Social Change classes have been the most challenging because they are new material and involve a lot of reading, writing, and new vocabulary.

Valerie said that she did learn in her college developmental class, but not much about reading—just writing because her class was writing-based. She felt like it did help her to become a better researcher. As a reader, she feels that she needs to slow down because she finds herself having to go back and read passages again. She feels like her middle and high school

English teachers exposed her to a variety of texts and this helps her to be more confident reading in all sorts of disciplines.

Valerie wants to have a career as a nurse because she has a strong desire to help others. She wants to “make sure they're (patients are) getting the proper care and treatment that they should be getting and that they're not overlooked.” She feels that she was overlooked by adults in the medical field when she was young, and she wants to “give a voice to kids who don’t have it.”

Attitude Toward Reading

Valerie had different attitudes toward reading throughout her school career. Currently, she likes it when she has time for it. She wishes that she had more time to read for pleasure. “It’s very relaxing. And depending on what I’m reading, I kind of get into it and feel like I’m in the book and in my own world. So, it’s kind of nice sometimes.” She considers herself a proficient reader, but “not orally.”

She likes to read books. Her aunt shares articles with her, mostly related to science and nursing, and she reads those, too. She prefers “physical books” to reading electronic print. She has a Kindle, but she does not really like reading with it.

Valerie mentioned that she is not always comfortable reading aloud. “I get tripped up on the words sometimes. When it’s something unknown to me, I tend to overthink it and skip over words or confuse words.” She was comfortable with the reading inventory because it was a short passage and not as much to remember, so she could “focus on the details.”

Reading Comprehension

Comprehension Strategies (Participant’s Perspective). Valerie gives her aunt and her teachers most of the credit for her love of reading. Her aunt has always encouraged her to read and has provided her with books and articles. She said that her English/language arts teachers

provided time for reading and taught her reading strategies such as highlighting key points, making annotations, underlining, circling, and marking unknown words. She told me that her middle school English teacher was “very adamant about us putting down annotations.” She admits that she has also looked for strategies that work for her on her own. In her core classes, she looks up words from the texts that she does not know.

Valerie considers herself an engaged reader and tries to keep her engagement by summarizing content as she reads. Sometimes she is so engaged that she does not like to summarize as she reads because she wants to “read and enjoy it and have my own thoughts rather than looking up and finding the ‘proper’ thoughts.”

Valerie told me that she had never heard the word metacognition, but she knows that “cognition is something with your brain.” Although she has never heard of the word or how it relates to reading, she rated herself high on most questions on the MARSII and said that the MARSII made her “think deeper into remembering what I read and why I read it, [and] what I was doing while I was reading.” Based on Valerie’s MARSII scores, she uses a high amount of global and problem-solving reading strategies, and a medium amount of support strategies. She rated herself 9 points higher in global strategies—such as having a purpose when she reads, using prior knowledge, previewing the text, skimming to note characteristics of the text, and deciding what parts of the text are most important and what to ignore— during the second administration of the MARSII, suggesting that she thinks that these skills have improved from the beginning of the study or that she is more aware of her use of global strategies. Valerie’s lower rating of support strategies on both administrations of the MARSII indicates that she is not using these strategies as often as the other two categories. These are strategies such as taking notes, reading aloud, summarizing, and asking herself questions as she reads. In her interviews, she

indicated that she does know about these strategies, but her survey results indicate that she may not use them as often as she should.

Ever since she learned to summarize and annotate in middle school, Valerie has used this strategy. She also highlights, underlines, or circles important things in the texts. She said that she “showed my [her] reading strategies” in her notes because she “had a lot of annotations on them” and “put down her own thoughts and connections to the text” as well as the words that she did not know.

She mentioned that she had also been taught to look for important information such as dates and names in history and science texts because “the themes are typically geared toward what led us there.... dates...who came up with this, who founded this, stuff like that.” This let me know that she had been taught some disciplinary literacies.

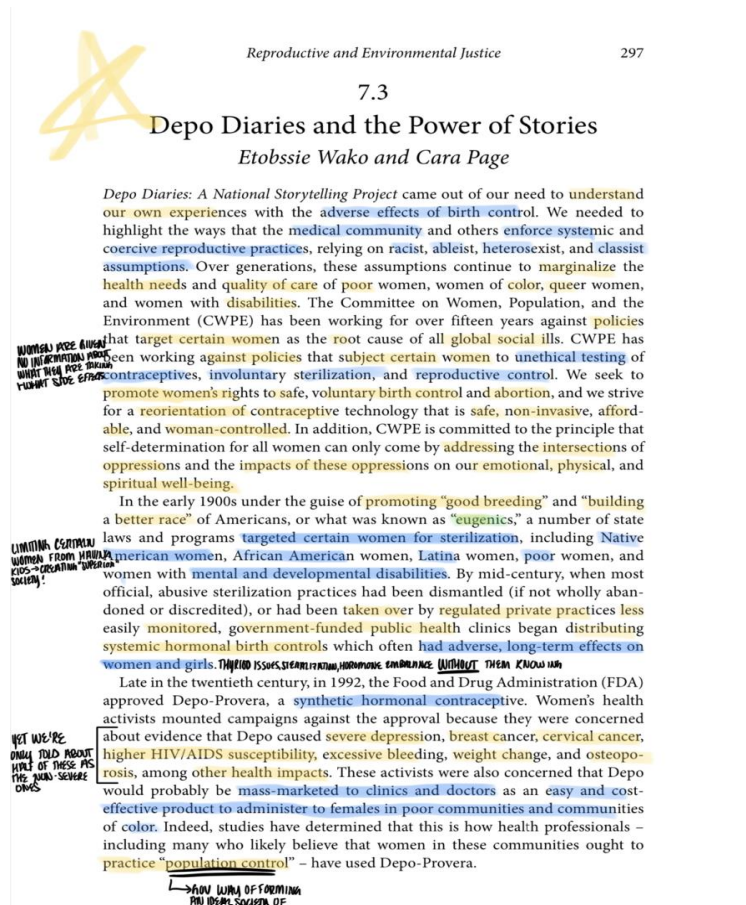
Comprehension Strategies (Researcher’s Interpretations and Field Notes). Valerie’s reading passage scores indicated that she read orally at a rate of 136 words per minute, which is slower than the average college student’s rate. She had some additions (“the,” “in,” and “was now”), repetitions (usually several words at the beginning of a sentence), and omissions (small words like “a” and “the”). She did go back and self-correct missed or mispronounced words as she read orally. Her comprehension score was 82% meaning that she answered 82% of the questions about the reading passage correctly. She did seem to lose her place a few times, which probably caused the repeated words and phrases. She seemed confident as she answered the comprehension questions.

Valerie provided four artifacts. They were notes about articles from her gender studies class (see Figures 3.2 and Figure 4.6 below). She demonstrated her use of highlighting, color-

coding, and annotations (including main ideas, descriptions, and notes on how she relates to the text).

Figure 4.6

Valerie's Artifact 2: Gender Studies Notes



After analyzing her data, I believe that Valerie underestimates her abilities and lacks confidence in her reading and writing skills. After helping her with some paper editing, I noticed that she gets her ideas across well on paper but seems rushed in her writing and needs to go back

and edit carefully. I also believe that she could benefit from learning some more disciplinary literacies and skills for analyzing and writing about texts.

Cross Case Analysis

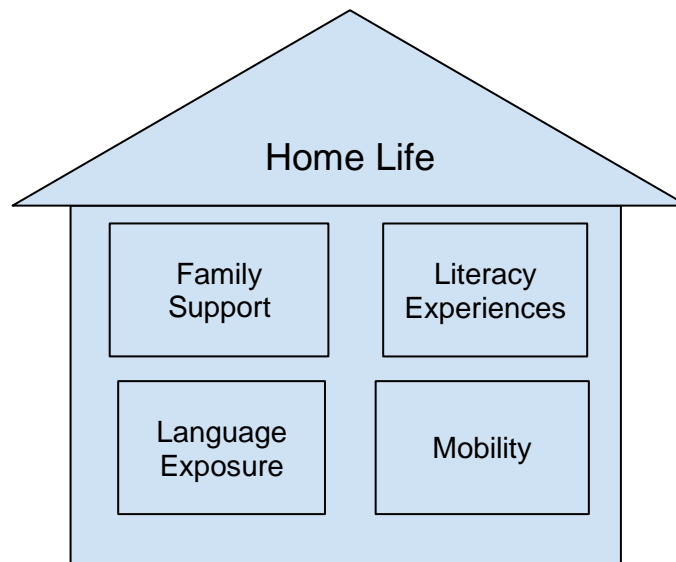
Each narrative shows the individual traits of each participant regarding their attitudes toward reading and school experiences. There are, however, similarities among the participants in their home lives, their literacy experiences in and out of school, the reading processes and strategies that they use, and their attitudes toward reading. These common themes emerged during the research process and data analysis.

Home Life

There were similarities in the home lives of the four participants, including their family support, literacy experiences, languages spoken, and moves. Figure 4.7 below shows a visual representation of these areas of home life. These experiences that involve the home may contribute to the participants' positive attitudes toward reading and/or their difficulties with reading (as measured in standardized tests), which contributed to their placement in a developmental reading class.

Figure 4.7

Home Life



Family Support

All participants described having supportive family members and who cared about education in general and even reading specifically. These family members have encouraged the participants throughout their lives. Daniela told me that her mother was instrumental in her learning to read and write, called her “my number one supporter.” Celeste shared that both of her parents value education because of their own experiences. Her father dropped out in middle school and her mother earned her bachelor’s degree while working full-time and with two kids under the age of 5. She spoke about her mother and everything that she did to make a difference in her life as a learner. Brianna mentioned that both of her parents considered education to be very important. They kept a close watch on her progress in school and would reward her for her hard work at school. Valerie said that her parents got divorced when she was in second grade,

but her aunt has played a huge role in her life as a reader and has provided her with texts to read throughout her life, along with encouragement.

Literacy Experiences

Along with family support, all participants recalled early literacy experiences at home and feeling prepared when they started school. Daniela remembers going to the public library with her mom as a young child. Considering the reading/writing connection, she said that her mom “always had napkins in her purse for me to write and draw on.” Celeste remembers a giant “Disney story” book, and that her mother would read at least two stories a night to her. In her first interview, Brianna told me that her mom and dad “always made sure we had some type of books around” and that they would go to Barnes and Noble on the weekends to pick out new books to read. Similarly, Valerie remembered that her aunt worked at a library and has always helped her to become interested in books by sending her books and articles to read and by video chatting with her about books.

Language Exposure

Three of the participants have varying degrees of bilingual and biliterate abilities through exposure to Spanish from young ages. Daniela and Celeste identify themselves as Hispanic/Latinx and told me that they speak Spanish and English. Daniela was not open to learning Spanish until a little later in life because it is her “father’s language.” Her father left when she was two years old. Celeste considers herself bilingual and remembers speaking and reading both languages at a very young age. Valerie identifies as Hispanic, and she remembers “hearing lots of Spanish as kid” and has learned secondary Spanish in school as a world language class, but she considers English to be the only language that she speaks.

Mobility

All of the participants mentioned mobility or relocations and changing schools in their interviews when talking about their school years. Daniela's family moved across town during her fifth-grade year and then back to where she had been before for most of her high school years. Celeste attended two different elementary schools, two different middle schools—a private school for most of her middle school years and then a public school for the last semester of eighth grade. She then stayed in public school for all of her high school years. Brianna's family moved from one state to another when she was in elementary school due to a promotion for her father. Valerie experienced a move—about 2 hours away—during the middle of her sixth-grade year and spoke about how the curriculum was different in her new school district. She considered it to her benefit, though, because she got many high school credits in middle school and was able to graduate a year early.

These school changes and mobility of the students could have negatively affected the participants' education because the moves might have caused them to miss instruction that they would otherwise have if they had remained at the same school. Not all states have the same curriculum and there can be differences in the times that information is taught even within the same district. The participants probably had to start at a different place—educationally—than where they were when they left their prior schools. When a student moves, there is also a period of adjustment for the student, and that adjustment period can detract from a student's focus on school. Therefore, home and family life can affect school life.

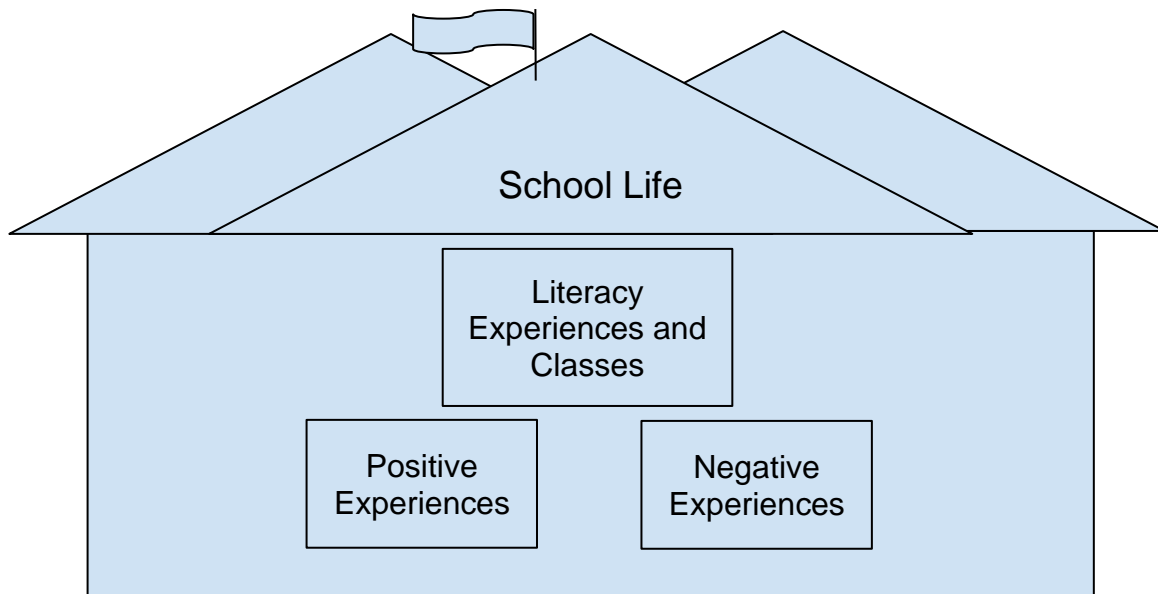
School Life

There were both similarities and differences among the participants as it related to their school life, including their literacy experiences, their classes, and their positive and negative

experiences. Figure 4.8 shows the different parts of the school life that are considered in this cross-case analysis.

Figure 4.8

School Life



Literacy Experiences and Classes

The participants reported similar literacy experiences in elementary, middle, and high school. They recalled teachers that they liked and books that they read. They remember some of the books that they read at all levels of school—particularly middle and high school. They also remember learning comprehension strategies—as early as fifth grade—that they have carried with them throughout the years and still use.

As for classes, Daniela mentions that she was mostly in regular classes while Brianna reported that she was in some pull-out and inclusion classes, specifically for math and reading.

She never could tell me whether she had a 504 plan, an IEP, or was in RtI, but she remembers getting the extra help when she needed it. Celeste and Valerie were in accelerated programs, and Valerie even graduated from high school a year early.

Positive Experiences

The participants spoke of mostly positive school experiences and good relationships with teachers. Daniela was happier after moving back to the school district where she had begun because she saw more familiar faces. Celeste was excited as she was talking about the private school that she attended and the unique opportunities there. Brianna was happiest in her theater and art classes and in English classes that used readers' theater. Although Valerie said that she did not like school and could not wait to graduate, she spoke very highly of her teachers and the support that they gave her. Valerie received different levels of service at different schools. She was in the gifted program in elementary school but did not really mention that for middle school and high school, although she did take advanced classes (dual enrollment) so that she could graduate early.

Negative Experiences

Daniela and Celeste reported some negative experiences with teachers related to reading. Daniela had an experience with a teacher who she said kept telling her that her answers were wrong and wouldn't help her correct her work. She was frustrated because she wanted to learn, but never knew why her answers were wrong. She also described her sophomore year of high school as a "bad experience." Celeste became very frustrated with her placement in the Accelerated Reader program and felt as though the librarian was not giving her a chance to read at her appropriate level. She considered herself to be a "slow reader," but thought that her books were being chosen regarding her speed instead of her actual reading level.

All four participants expressed frustration with standardized testing, including the STAAR test and the TSIA. Valerie felt that she missed out on some skills related to analyzing text and instead learned to “take a test.” She told me that she had “test anxiety” related to the STAAR test. Celeste also referred to herself as having “test anxiety,” and Brianna told me that her test performance depends on the day and could vary greatly depending on what is going on with her that particular day. She also said that she felt more “pressure” when STAAR testing began and that it was worse during “heavy STAAR years” when there were many STAAR tests to take. Daniela said that she does not “see the point” in the TSIA because she already knows that she “can write.”

Reading Processes and Strategies

There were both similarities and differences in the reading processes and strategies that the participants used. These strategies relate to what they learned in school, what was evident in their artifacts, what they indicated on the MARSII, their understanding and use of metacognitive strategies, and their understanding and use of disciplinary literacies. Figure 4.9 shows the categories of their reading processes and strategies.

Figure 4.9

Reading Processes and Strategies

	Reading Processes and Strategies
	<p>Learned in School</p> <p>Indicated on the MARSI</p> <p>Metacognitive</p> <p>Disciplinary Literacies</p>

Processes and Strategies Learned in School

Daniela, Celeste, Brianna, and Valerie all described reading strategies that they had been taught during their school years, mostly in middle and high school. Some of these strategies were notetaking (Cornell Notes were a popular method), making annotations, underlining, circling, highlighting, summarizing, and re-reading the text.

The artifacts showed the strategies that the participants learned in school. Overall, there was not much variation in the strategies that were evident in the participants' artifacts. The most commonly used strategies in the artifacts were underlining, highlighting, color-coding, and notetaking, especially the use of Cornell-style notes. Annotations were seen in the form of summaries, definitions, main ideas, descriptions, and personal connections relating to the text (see Figures 4.4 and 4.6).

Strategies Indicated on the MARS

The ratings on the MARS were very similar among all of the participants. Each participant rated herself high on global and problem-solving strategies. The ratings on the support strategies were half medium and half high. From the first to the second survey, Daniela's rating changed from medium to high, Celeste's changed from high to medium, Brianna's stayed at high for both surveys, and Valerie's stayed a medium for both surveys. All of these scores indicate that the participants think that their use of reading strategies is good.

Metacognitive Strategies

None of the participants knew the meaning of metacognition or recalled direct instruction of metacognitive skills such as think-alouds. However, some of them did indicate evidence of possibly using metacognition and metacognitive strategies in their reading assessments, their artifacts, and their MARS surveys. This was most evident in the self-corrections on their reading assessments. Three of the four participants monitored and self-corrected their oral reading when they made mistakes.

Disciplinary Literacies

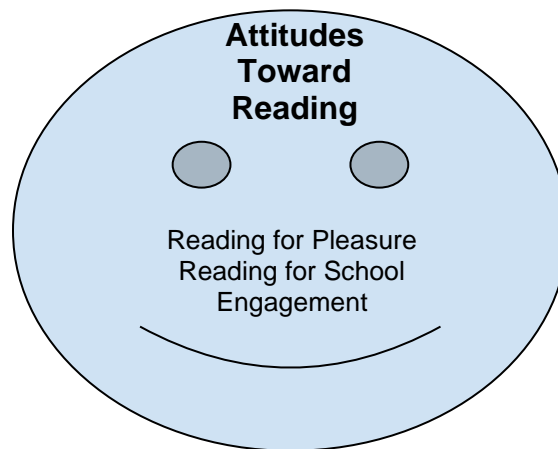
All students seemed to have been taught and used general reading comprehension strategies that can be used across all content areas. However, they did not use strategies specific to each subject area, or disciplinary literacies. They were able to tell me what literacies might be important in their future careers. In their interviews when I asked them about disciplinary literacies, they all described general reading strategies except for Valerie. She told me that she had learned disciplinary literacies for science and social studies, such as looking closely at the date and the author of an article in order to consider the context.

Attitudes Toward Reading

I was pleased to learn that all of the participants have generally positive attitudes towards reading. Figure 4.10 shows that their attitudes toward reading can be divided into the following categories: reading for pleasure, reading for school, and reading engagement.

Figure 4.10

Attitudes Toward Reading



Reading for Pleasure

All of the participants indicated that they like to read for pleasure. Two even said that they “love” to read and Valerie mentioned that reading is “relaxing.” Some admitted that they do not have much time to read for pleasure when they are taking classes. They each told me about books that they have enjoyed and what digital literacies they use regularly. When given a choice, they prefer reading a hard copy of a book to reading online on a computer or another

electronic device. Among them, they enjoy reading novels, self-help books, religious texts, websites, biographies, Wattpad, magazines, and many other texts.

Reading for School

The general consensus among the participants is that reading textbooks can be challenging, especially science texts. They mentioned that the science vocabulary can be difficult to understand, making the text more challenging to read and comprehend. They also stated that science has a math component and lots of “numbers” that make it more difficult to comprehend.

Engagement

They all considered themselves engaged readers. Daniela admitted that she may not be as engaged when she is “cramming” for a test or has a lot to read. Celeste told me that she is always engaged because she makes sure that she is able to focus when she is reading. Brianna described her engagement and how she sometimes “finishes a book in one day,” and Valerie summarizes what she is reading as she goes to maintain her focus and engagement.

CHAPTER V

RECOMMENDATIONS AND CONCLUSIONS

This study highlights the perspectives of four college developmental readers in an authentic way. It makes a unique contribution to the field by privileging the voices, perceptions, and experiences of the students in developmental reading classes. In this chapter, I will review the study's purpose and findings, discussing the potential contributions. Further, I will provide recommendations based on this study and other research to improve students' reading skills at all grade levels with the long-term goal of more adequately preparing students for college. Finally, I will discuss the limitations of the study and suggest areas for future research.

The purpose of this qualitative case study was to analyze the literacy experiences, reading processes and strategies, and attitudes toward reading of four college developmental reading students. The questions that guided this study were: (1) How do developmental reading students recall and describe their literacy experiences, in and out of school?; (2) How do developmental reading students describe the processes and strategies they use for comprehending text, and where did they learn these processes and strategies?; and (3) How do developmental reading students describe their attitudes toward reading, in and out of school? The theoretical frameworks that influenced my study were two constructivist theories—engagement theory and metacognitive theory—along with disciplinary literacies.

In the review of literature, I described the past, present, and future of college developmental readers and how the need for developmental reading programs has remained the same although the content of the programs themselves and the implementation of the programs has changed. I also explored the inequities of developmental reading classes, including a

disproportionate number of Black and Hispanic students in college developmental reading classes.

In order to answer the research questions, I employed a qualitative case study design to analyze four college developmental reading students' reading histories, practices, and perspectives through surveys, artifacts, a reading assessment, and three interviews. My positionality as a reading teacher with 30 years of experience across grade levels, including experience teaching a college-level developmental reading class, provided me with a unique perspective on how students are taught to read in school to make meaning from various texts. The pilot study that I conducted gave me an overview of one developmental reader and influenced the design of this study, particularly the data collected.

Through iterative data analysis, I created narratives of each participant and shared a cross-case analysis. From these findings, I am able to explain the significance of the study and its unique contributions to the field of reading education in general, not just college developmental reading education.

Case Study Participants

Although the developmental reading students in this case study were all women of color, they were a highly diverse group of students in other ways. They came from different backgrounds and academic experiences, and they did not fit the stereotype of being unmotivated, unengaged, or from a family that does not prioritize reading, qualities that some might assume describe developmental readers. Indeed, one of the participants was in some advanced high school classes and even was asked to skip a grade in elementary school, while a different participant was placed in a gifted and talented program in early elementary school and graduated from high school in only 3 years. Additionally, one of the participants was in what she described

as a special education program, and another completed mostly grade-level classes in high school, illustrating their diverse educational pathways.

Another key finding was that all four of the participants stated that they liked to read for pleasure and had positive attitudes toward reading, something that one might not expect of students in a developmental reading class. Further dismantling potential stereotypes, all participants told stories of family members who value reading and who have encouraged them to read, even reading with them when they were younger. Therefore, their at-home literacy experiences are not an area of deficiency. They reported that they all learned basic reading strategies in school and were able to connect with and respond to texts for assignments from elementary through high school. Similarly, a study by Cantrell et al. (2013) indicated that students in developmental reading classes reported that “their confidence (in reading) was positively influenced by knowledge of reading strategies such as annotating text and analyzing text features” (p. 22). However, this same study indicated the developmental reading students in the study had lower levels of self-efficacy—both in academic and personal settings— than their peers who were not in developmental classes.

One thing that stood out during the interviews with the participants was that all of the participants moved at least once (and sometimes two or three times) during their K-12 schooling experience. These moves and changing schools may have caused a negative impact on the participants' education and their reading abilities. According to the Institute of Medicine et al. (2010), children who move frequently can end up with lasting negative effects from moving, especially if they move when they are still developing skills such as basic learning and social skills. Similarly, Coley and Kull (2016) found that frequent moves often lead to academic decline for students. These moves were accompanied by other elements that could have

negatively affected the participants' academic performance such as parent job changes and other family or personal issues, including divorce. The participants reported periods of social adjustment, class and curriculum differences, and just general changes and challenges when they moved to a different school.

All study participants demonstrated a lack of knowledge about disciplinary literacies. They all stated that they struggled with science texts particularly. They had some basic comprehension strategies that they could apply to all subject areas (such as Cornell notes), but they did not mention or demonstrate many—or in some cases any—skills related to reading in specific disciplines. These basic comprehension strategies, or generic comprehension skills, as described by Shanahan and Shanahan (2008) do not prepare students for the disciplinary literacy demands for college reading and writing (Wahleithner, 2020). All four participants also expressed difficulty synthesizing information for college-level writing. They told me that they had practiced how to read short passages and answer questions for a multiple-choice type test, but that they were not skilled when it came to reading authentic texts and writing about the ideas in the text.

Also associated with testing, the participants recalled practicing reading strategies related to taking standardized tests. Most of the participants felt that they had not learned all of the reading strategies and skills that they needed for college due to the narrow focus on standardized testing preparation in their secondary classes. Davis and Vehabovic (2018) explain the consequences of an overemphasis on standardized tests in the following statement: “Instead of privileging the tested curriculum, schools should create rich opportunities for students to experience the aspects of comprehension that are not testable. This includes prioritizing authentic texts in various modes and genres over test like passages” (p. 585).

These participants also reported nervousness and anxiety related to standardized tests, including the Texas STAAR assessments and the TSIA that placed them into their college developmental class. Their feelings and concerns echo Davis and Vehabovic (2018) who conclude the following in their study:

Test preparation instruction can disguise itself as literacy instruction. An important step in resisting test-centric instruction is learning to notice and name it for what it is: an unjust and limiting set of practices that reduces students' opportunities for literacy learning. Test preparation is not the solution to raising students' test scores in reading, and it may have long-lasting negative effects on students' literacy lives. (p. 586)

Contributions

According to Unrau and Alvermann (2013), constructivism is “a widely applied theory of learning that explains how knowledge and meanings are constructed, rather than transmitted or absorbed, through our interaction with others and the environment” (pp. 56-57). This study with college developmental readers was driven by two constructivist theories, engagement theory and metacognitive theory, and tells the stories of the participants from their own perspectives. Constructivism is evident in the way that the participants learned throughout their years from their earliest years at home, through their elementary, middle, and high school years to college. In their interviews, the participants described their knowledge of reading strategies and how they learned to create meaning based on their personal and school experiences and their interactions with others, including parents and teachers. The participants recalled and described their literacy experiences in their interviews, the comprehension processes and strategies that they use in their artifacts and the MARSİ surveys, and their attitudes toward reading as described by the participants themselves. They also described their engagement with text and their use of

metacognitive strategies, which both involve making connections and constructing meaning from text.

This study contributes to the literature regarding college developmental readers, specifically in the areas of engagement, metacognition, and disciplinary literacies by providing an uncommon look at developmental reading students from their own perspectives. Learning about developmental readers from developmental readers themselves is an important contribution because, as Renmark (2019) indicated, there is a dearth of research about how developmental readers view themselves, their skills, and their deployment of various reading strategies. Connor (2013) and Randel (2014) also discuss the lack of the perspective of the developmental reader in research.

Drawing from their voices, all four study participants described themselves as engaged readers. Their backgrounds and experiences supported characteristics of engagement such as teacher support and using reading strategies which were described by the participants in their interviews. This supports the findings of prior research regarding engagement, including Guthrie and Wigfield (2000) and Guthrie et al. (2004), which details the necessary elements of engagement including: prior knowledge, cognitive skills, social interaction, reading strategies, teacher support, choice, outside (of school) literacies, and authentic texts and purposes for reading.

Although metacognition has been the subject of much research since Flavell's (1971) study on memory and reading, these participants did not evidence an understanding of this concept. Nevertheless, some described using metacognitive processes, but did not know the word or exactly what they were describing. It is clear that my research supports the research of Young and Ley (2000, 2002, 2005) who studied college students and found that students may struggle in

school and not know why because they do not understand how much they do not know. In other words, college developmental reading students may not understand the process of metacognition, so they may not be able to identify it. Also, Allen and Hancock's (2008) study illustrates that increased metacognition equals increased comprehension. The use of—or lack of—metacognitive strategies was evident in the reading comprehension scores of my study participants after they read orally. For example, Brianna did not make self-corrections as she read which might indicate that she is not self-regulating as she reads, and she had the second lowest comprehension score of the participants.

Finally, this study contributes to the field of disciplinary literacies as well. Research suggests that when students understand disciplinary literacies, their comprehension increases (Moje, 2008). Participants in this study indicated that they were most challenged by science texts. This is likely because they do not have a thorough understanding of literacies that are unique to each discipline, like science. Interviews with the study participants indicated that they did not have much knowledge of disciplinary literacies. They had mostly been taught general reading strategies that could be used across all subject areas, not specific literacies unique to each discipline.

As Moje's (2008) research suggests, teachers need to be aware of the literacies in their own disciplines and explicitly teach those along with their content. A focus on teaching disciplinary literacies should increase students' knowledge in the subject matter, not just their reading skills. The use of Moje's four Es (2015)—(1) engage, (2) elicit/engineer, (3) examine, and (4) evaluate—might have helped the participants to better understand their subject area texts and to perform better in college reading and writing. The participants did not indicate that

teachers had demonstrated how to elicit/engineer the subject area curriculum to help them learn the vocabulary and the other unique qualities of particular disciplines.

Implications

Based on findings from this study, especially in relation to the need for more instruction related to metacognition and disciplinary literacies, I will provide suggestions for K-12 instructors to use in the classroom. I will also make suggestions for college instructors and literacy teacher educators that might promote success as students transition from high school reading to college reading.

For Kindergarten-3rd Grades

For the kindergarten through third grade years, I recommend the following based on the findings: (1) identifying students who need extra support with reading to provide early interventions (for special education, bilingual students, etc.) so they do not get behind, and (2) providing students with authentic and culturally-relevant texts to read in order to increase engagement. I also recommend (3) giving students time to read for pleasure in order to help them develop positive attitudes about reading.

In their early school years, all participants seemed to have relatively normal early experiences, as far as what would be expected in K-3 classrooms. They recalled reading stories in class and doing oral reading assessments. They also remembered being in reading groups, taking books home to read, and learning phonics. However, Daniela expressed frustration with her second grade teacher whom she did not feel communicated well with her and would not answer her questions about why her comprehension answers were wrong. Celeste was frustrated and felt defeated while doing Accelerated Reader assignments in fourth grade and kept getting moved down reading levels because she was a “slow reader.” Both of these students came from

homes where both Spanish and English were spoken and identified as Hispanic/Latinx. Perhaps these situations would have been different if these students had received instruction in a bilingual program in which they could have received reading instruction in both their first (L1) and second (L2) languages. In a study by Steele et. al (2017) students who participated in Dual Language Immersion programs scored higher than their peers on state reading tests and also performed as well or better than their peers in content area classes. Further, Borman et al. (2020) illustrated the positive effects of an early reading intervention in Spanish, Descubriendo La Lectura, which is the Spanish language iteration of Reading Recovery.

Just as Daniela and Celeste could have possibly benefited from a bilingual program, there are many students who could benefit from other types of early interventions in the early childhood years. Assessing students to find out what their needs are and how to help them should start early. This could help to identify students who are behind in reading or who might have a reading disability such as dyslexia. According to Snowling (2013) “the RTI (Response to Intervention) approach to assessment and intervention appears to hold promise for the early identification of children who are failing to learn to read at the expected rate” (p. 11) and the goal is to identify students who need help before “a sense of failure sets in” (p. 12).

Additionally, using authentic and culturally-relevant texts is beneficial to all students and can increase engagement (Christ et al., 2018; Ebe, 2012; Stewart, 2017; Stewart et al., 2022). Celeste was aware of her reading level and was reading books to pass a test. She was not reading for an authentic task or for pleasure with the Accelerated Reader texts. She was reading books solely based on their lexile/grade levels. Both Celeste and Daniela found excitement in their reading when they discovered Wattpad in upper elementary and middle school where there are a variety of genres and stories to which they can relate. A 2018 study by Christ et. al at Oakland

University showed that students' reading comprehension increased when they read culturally-relevant books. Specifically these students were 16% more likely to connect personally with books that reflected their lived experiences. This can help students to develop positive attitudes towards reading, just as the study participants Daniela and Celeste were more eager to read when they were able to choose their own books and genres.

Helping students develop a love for reading at a young age is crucial to developing lifelong readers. Students who love to read are more likely to read, and students who read regularly are better readers than those who do not. According to Krashen (1993) as cited in Duncan (2010), "People who read frequently possess stronger literacy skills overall—larger vocabularies, enhanced writing abilities, improved spelling, and better awareness of grammar and punctuation rules" (p. 91). Another strategy that could help readers for a lifetime is understanding metacognition. Teaching metacognitive strategies, including teacher think alouds, can help students to understand this process and learn to better connect to text and help them develop lifetime learning strategies. It would be helpful if students learned this in the early elementary years and continued to develop this skill throughout their school years.

For 4th-12th Grades

Similarly to what I suggested for K-3rd grades, 4th -12th graders could also benefit from reading for pleasure and developing metacognitive strategies. In addition to these, teaching word segmentation strategies such as syllable dividing can be helpful to students, as can learning about disciplinary literacies and how to use them.

Just as recommended for K-3 students, students in grades 4-12 need to have access to culturally-relevant and authentic texts, and they need to have time to read for pleasure. Students need to have relatable texts and choices to improve their reading engagement as seen in Figure

2.3, which demonstrates how authentic texts, choice, and connecting with text are elements of reading engagement. According to Feger (2006), her English language learner students' engagement increased when she provided them with culturally-relevant texts to read, and they began to like reading and wanting to read in class similar to other studies with students acquiring English (Ebe, 2012; Stewart, 2017). Often, the reading in middle and high school is related to subject area content and standardized test preparation. It is important for students to have choices of what to read and time for independent reading as they continue their education.

Beginning in fourth grade, students have more subject area reading and texts, so metacognitive strategies become even more important. As noted in Figure 2.1, the use of metacognitive strategies—along with reading engagement and understanding and applying disciplinary literacies—leads to increased comprehension (Guthrie & Wigfield, 2000). Students should be taught how to think about what they are reading as they read and teachers can model the strategies they use for students (McKeown & Gentilucci, 2007). Strategies that can be used across all content areas also become important during the late elementary and middle school years. Figure 2.4 shows a visual of the elements and qualities of metacognition, including that metacognition is taught by modeling metacognitive processes and think-alouds. Allen and Hancock's study (2008) with fourth through sixth graders proved that increased metacognition equals increased reading comprehension as measured by the Oregon State Assessment and the *Burns and Roe Informal Reading Inventory* (1999). Students who used cognitive profiles and had increased metacognitive awareness outperformed those in the control group who were not taught cognitive awareness and metacognitive strategies.

Teaching syllable dividing and word segmentation might start in the earlier grades, but it becomes even more important as students are required to read longer texts with larger, more

complicated words. Both Daniela and Brianna had difficulty breaking down multi-syllable words. In a 2001 study by Bhattacharya, adolescents with reading difficulties were studied and those who learned word segmentation and syllable dividing outperformed those who just learned whole-word strategies and those who did not learn word attack strategies in the areas of reading words, decoding nonwords, and spelling words. The ability to break down large words into smaller parts is necessary for students' independent reading and comprehension.

Eckert (2008) believed a gap between secondary and postsecondary reading instruction causes the need for college developmental reading. I think that part of this gap is related to a lack of disciplinary literacies. Learning disciplinary literacies is key for college success. In college, students must read, analyze, and write about text. In order to do this, they must know how to navigate all types of texts for different subject areas. Wilson et al. (2014) explained how they specifically taught literacies for engineering design in the high school which serves as a model of how other subject areas might approach this task. Figure 2.5 shows the qualities and characteristics of disciplinary literacies that are important to include across content areas: Analysis, synthesis, critical thinking, and understanding unique vocabulary and text structures. Upper elementary, middle, and high school teachers need to teach disciplinary literacies to their students in order to better prepare them for college learning.

For Colleges and Universities

In response to the gap in secondary and post-secondary reading instruction that Eckert (2008) espoused, some states have tried models of instruction involving a bridge year for developmental students to connect high school learning to college learning. Texas has used summer bridge programs to help students transition from high school to college (Barnett et al.,

2012; Strayhorn, 2011). In these programs, the focus is on reading, study, and organization strategies that will prepare students to be successful in college.

In addition to programs like this, there are many other things that can be done at the college/university level regarding college developmental reading. Testing and placement for college developmental reading classes should be studied closely in order to determine what students really need developmental classes and what students could continue on to gateway courses. Different models of placement and instruction, such as summer bridge programs, reading programs separate from writing programs, integrated reading and writing programs (like the one that the participants in this study were in), and developmental reading programs paired with a content area class—should be examined to see what works best.

Additionally, professors and instructors should prioritize teaching disciplinary literacies in authentic settings within their college and university courses. This might be accomplished through PLCs where instructors work in groups across disciplines to better understand the unique complexities and demands of the literacies required by their areas. It is important for instructors to know what the specific literacy demands are in their disciplines and how to teach them to students. This was demonstrated in a study by Gregory and Bean (2020) who created PLCs at a community college. Teachers from different subject areas worked together to discover the vocabulary and text structures of their own disciplines. This was an effective way to help them learn how to identify and learn how to teach disciplinary literacies.

Additionally, states should re-evaluate the testing and placement of students in developmental reading classes. A student's performance on one test should not be the only criteria for class placement. In this study, all the participants were women of color, and they were all taking a developmental reading class because of a test score. They had to take this class

to continue in their college studies. The findings suggest that some of them might not have needed this course to be successful in other college courses. Florida has seen a decrease in the number of Black and Hispanic students in developmental reading classes, more students are starting with regular introductory college-level courses, and more students are graduating from college. These results have been achieved not only by the SB 1720 but also providing better advising and academic support for students. If Texas waived testing and placement for developmental reading, the participants in this research study would have been able to opt out of the developmental reading class to begin their introductory college-level courses.

Texas and other states allow students to place out of developmental courses with alternatives to the state-mandated tests such as the TSIA. The PSAT and other standardized tests provide ways for students to bypass developmental classes and proceed with freshman level courses. All the participants in my study felt that their reading and writing skills were better than their test scores indicated. Two of them did not retake the test after they failed it the first time due to the cost, which indicates that students with more money might be more likely to retake the test and have a better chance of not having to take college developmental reading. Daniela explained in her second interview:

I really don't see the point of the TSI. Because if you don't make the perfect score, you have to keep on paying to retake it. And it's honestly... to me, it's not worth it, because I have to save every piece of money I have and... because I know I can do better and I'm good at what I write about, and I don't need a computer to tell me.

Perhaps other states should make efforts to decrease inequities in the placement of students in mandatory developmental reading classes. Another alternative might be to provide an introductory reading class at the college level for all students, just as there is often an

introductory composition class. Regardless of the approach states take, the purpose of the developmental classes should be closely examined.

As the purposes for these classes become clearer, there are varying options colleges and universities might choose about how to structure these classes. In the past, Texas colleges and universities had separate classes for reading and writing. Now those courses have been combined to form a newer course named Integrated Reading and Writing (INRW) in order to accelerate the time that students spend in developmental classes. Although instructors have seen the value of the integrated programs as making connections between reading and writing, a study by Paulson et al. (2021) found that students were more successful at passing developmental reading and writing as separate courses, and Texas community college instructors surveyed stated there is not enough instructional time with the combined class.

Pairing a developmental reading class with another core class could be helpful. Brianna said it was “really great” that her developmental reading class at Bluebonnet University was paired with her English class. She felt that it helped her understanding in both courses. It could also be beneficial to pair a developmental reading class with a science or social studies class or at least include authentic work with other disciplines. I think pairing a developmental reading class with a science class would be ideal since all my participants expressed that science was the hardest subject area for reading and making sense of the text. This idea was studied by Armstrong and Reynolds (2011). In their study, there were modules that provided “opportunities for students to experiment with the types of literacy practices used in particular academic disciplines (biology, psychology, and history)” (p. 5). They determined that pairing a developmental reading class with a specific content-area class is not always possible, but that it

is essential that students are able to practice reading strategies and disciplinary literacies in an authentic setting.

Limitations and Future Research

Although this study provides a unique view into the histories, perceptions, and experiences of college developmental reading students, it is not widely generalizable because it only included a small number of students. Further, all of the participants who volunteered were female. I think a study that includes both male and female students might produce different results. Along these same lines, a study that includes participants from different schools and states and from different types of developmental reading programs could produce more generalizable results. There was some ethnic diversity within the study which included two students who identify as Hispanic/Latinx, one who identifies as Hispanic, and one who identifies as African American, but the study did not include a wide variety of ethnicities. A study that includes a more diverse population might provide more perspectives and different data.

Conclusions

Developmental reading classes are constantly changing, even from the time I taught a class and did a pilot study to the time when I conducted my dissertation research study, which was just two years. During that time—at the same university—the Fundamentals of College Reading and Learning class in the reading department was combined with a writing class and became an INRW class which was taught in the English department. With changes in legislation, testing, and class structure, developmental reading classes vary significantly from the university level to the community college level and from state to state.

Developmental readers are a diverse group. Some might assume that developmental readers come from homes that didn't value education or that they were students who struggled

throughout their school years, but this is not always the case. Some are just students who didn't pass the placement test. All of the developmental readers in my study were students who like to read and consider themselves to be engaged readers.

I did find that all of the developmental readers in my study used basic reading comprehension skills and strategies, but they didn't have a full understanding of metacognition and disciplinary literacies. I believe that they would have benefited from metacognitive think-alouds throughout their school years and from being taught how to read and write for specific subject areas. Having more advanced metacognitive reading strategies could have helped the case study students to perform better on the testing that placed them in the developmental reading class.

With regard to disciplinary literacies and referring back to the study by Wahleithner (2020), students reported that they learned basic comprehension skills but not the analytical skills that they needed for reading and writing in college within specific disciplines. This was echoed in my study. I believe that learning more about how to read and analyze information for specific disciplines could help my case study students' success in college and beyond.

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APPENDIX A

RECRUITMENT STEPS

IRB and modifications

Initial IRB: created 7/6/21, approved 9/16/21

IRB modification #1: created 10/8/21, approved 10/20/21

- Added \$25 Amazon gift card as incentive
- Requested sites in addition to Bluebonnet University: Eastern Carolina Community College (NC), College by the Bay (FL), Co-County State College (FL), and Western County College (TX)
- Requested permission to post study information in the College Reading Instructors (CRI) newsletter

IRB modification #2: created 11/10-21 approved 12/02/21

- Added a flyer and asked for permission for it to be shared on social media: Facebook, Twitter, and Instagram
- Asked for permission to share same flyer with friends and colleagues through email and text
- Asked for permission to share the flyer and/or recruitment script on the TWU Listserv
- Changed the Amazon gift card value to \$50

Sunnyside Community College (FL)

5/21-1/22

- Former college president connected me with a representative/friend from Sunnyside Community College
- Friend then referred me to another person who connected me to the appropriate department
- Communicated by phone and email with the Director of Institutional Research
- Filled out all required forms/research proposal and sent all details requested about my study
- Was told that she needed to look everything over and would get back to me soon about recruiting participants and then stopped returning my calls and emails (followed up through 1/22)

Bluebonnet University

9/17/21-12/7/21:

ENG 1003 professors

- Bluebonnet University: contacted all professors of developmental reading classes via email and phone—only one responded
- She put my video (introducing the study) and a link to my study on her Canvas class page and later added my recruitment flyer to her Canvas page
- No potential participants responded to the Initial Exploratory Survey.

1/26/22, 3/9/22, 4/12/22, and 5/5/22

Listserv: posted on Bluebonnet University Listserv (all Bluebonnet University main campus students)—posted recruitment flyer and links to study information

Eastern Carolina Community College (NC)

10/21-4/22

- Contacted president's executive assistant
- Referred to English/reading department chair
- College President emailed approval letter to recruit participants
- Approval letter added to IRB
- Communicated by phone and email with 3 instructors who agreed to share my recruitment video and link to my study (and later my recruitment flyer)
- One instructor also shared with several adjunct faculty
- Instructors stopped returning emails in January 2022
- No potential participants responded to the Initial Exploratory Survey.

College Reading Instructors (CRI)

10/21-4/22

- Contacted editor of CRI newsletter
- She agreed to include my recruitment script in the next CRI newsletter
- Once I received IRB approval, she told me that she couldn't put my recruitment script in the newsletter, so she referred me to the Listserv
- Recruitment script and flyer were included in the Listserv for learning assistance professionals (approx. 2000 people on listserv)
- No potential participants responded to the Initial Exploratory Survey.

Co-County State College (FL):

11/21-4/22:

- Contacted Provost about recruiting at Co-County State College
- Completed research proposal and other requirements for recruitment
- Proposal was approved by the research committee
- Approval letter/email sent to IRB. Dean of English department shared my recruitment flyer with the English department and asked them to share with their students
- No participants responded to the Initial Exploratory Survey.

Social Media

12/21-5/22

- *Facebook*—posted recruitment flyer 3 times on personal Facebook page and once on neighborhood page; several friends shared with their kids and instructors shared with their own college classes from the Facebook link
- *Twitter*—posted twice and reposted once on Twitter, tagged my advisor and she shared the tweet, friends and colleagues also shared the information
- *Instagram*—posted once on Instagram with link in bio to flyer
- No potential participants responded to the Initial Exploratory Survey.

Other

12/21-5/22

- Daughter's teacher shared flyer with former colleague in NY college
- Dean of Education at a major Florida university shared flyer with former colleague at a Rhode Island university
- Shared flyer with professor at a local university

- Graduate school classmates shared with friends and colleagues
- Study participants shared flyer with friends
- I shared flyer with teacher friends and former colleagues
- Daughter shared flyer with college-aged friends who shared with others
- Cousin (who works as a county administrator) shared my information with several Virginia community colleges; One president followed up with me, but the contact that he sent me never responded.
- No potential participants responded to the Initial Exploratory Survey.

APPENDIX B

INITIAL EXPLORATORY SURVEY (GOOGLE FORM)

Initial Exploratory Survey

Developmental Reading Class Survey

*** Required**

What is your name? *Your answer

What is your email address? *Your answer

Why are you in this developmental reading class? *Your answer

Did you take any advanced English/Language Arts classes in high school (AP, Honors, or IB)? If so, what classes and what year or grade level? *Your answer

Did you receive any special services in high school (special education, gifted and talented, 504 plan, ESL, etc.)? If so, which ones? *Your answer

What languages do you speak and/or read? *Your answer

What are your career goals? *Your answer

APPENDIX C

METACOGNITIVE AWARENESS OF READING STRATEGIES INVENTORY

Metacognitive Awareness of Reading Strategies Inventory (MARSİ) Version 1.0

Kouider Mokhtari and Carla Reichard © 2002

DIRECTIONS: Listed below are statements about what people do when they read academic or school related materials such as textbooks, library books, etc. Five numbers follow each statement (1, 2, 3, 4, 5) and each number means the following:

- ☐ **1** means “I **never or almost never** do this.”
- ☐ **2** means “I do this **only occasionally**.”
- ☐ **3** means “I **sometimes** do this.” (About **50%** of the time.)
- ☐ **4** means “I **usually** do this.”
- ☐ **5** means “I **always or almost always** do this.”

After reading each statement, **circle the number** (1, 2, 3, 4, or 5) that applies to you using the scale provided. Please note that there are **no right or wrong answers** to the statements in this inventory.

TYPE	STRATEGIES	SCALE				
GLOB	1. I have a purpose in mind when I read.	1	2	3	4	5
SUP	2. I take notes while reading to help me understand what I read.	1	2	3	4	5
GLOB	3. I think about what I know to help me understand what I read.	1	2	3	4	5
GLOB	4. I preview the text to see what it's about before reading it.	1	2	3	4	5
SUP	5. When text becomes difficult, I read aloud to help me understand what I read.	1	2	3	4	5
SUP	6. I summarize what I read to reflect on important information in the text.	1	2	3	4	5
GLOB	7. I think about whether the content of the text fits my reading purpose.	1	2	3	4	5
PROB	8. I read slowly but carefully to be sure I understand what I'm reading.	1	2	3	4	5
SUP	9. I discuss what I read with others to check my understanding.	1	2	3	4	5
GLOB	10. I skim the text first by noting characteristics like length and organization.	1	2	3	4	5
PROB	11. I try to get back on track when I lose concentration.	1	2	3	4	5
SUP	12. I underline or circle information in the text to help me remember it.	1	2	3	4	5
PROB	13. I adjust my reading speed according to what I'm reading.	1	2	3	4	5

GLOB	14. I decide what to read closely and what to ignore.	1	2	3	4	5
SUP	15. I use reference materials such as dictionaries to help me understand what I read.	1	2	3	4	5
PROB	16. When text becomes difficult, I pay closer attention to what I'm reading.	1	2	3	4	5
GLOB	17. I use tables, figures, and pictures in text to increase my understanding.	1	2	3	4	5
PROB	18. I stop from time to time and think about what I'm reading.	1	2	3	4	5
GLOB	19. I use context clues to help me better understand what I'm reading.	1	2	3	4	5
SUP	20. I paraphrase (restate ideas in my own words) to better understand what I read.	1	2	3	4	5
PROB	21. I try to picture or visualize information to help remember what I read.	1	2	3	4	5
GLOB	22. I use typographical aids like bold face and italics to identify key information.	1	2	3	4	5
GLOB	23. I critically analyze and evaluate the information presented in the text.	1	2	3	4	5
SUP	24. I go back and forth in the text to find relationships among ideas in it.	1	2	3	4	5
GLOB	25. I check my understanding when I come across conflicting information.	1	2	3	4	5
GLOB	26. I try to guess what the material is about when I read.	1	2	3	4	5
PROB	27. When text becomes difficult, I re-read to increase my understanding.	1	2	3	4	5
SUP	28. I ask myself questions I like to have answered in the text.	1	2	3	4	5
GLOB	29. I check to see if my guesses about the text are right or wrong.	1	2	3	4	5
PROB	30. I try to guess the meaning of unknown words or phrases.	1	2	3	4	5

Reference: Mokhtari, K., & Reichard, C. (2002). Assessing students' metacognitive awareness of reading strategies. *Journal of Educational Psychology*, 94 (2), 249-259.

Metacognitive Awareness of Reading Strategies Inventory

SCORING RUBRIC

Student Name: _____ Age: _____ Date: _____ Grade in
 School: ☐ 6th ☐ 7th ☐ 8th ☐ 9th ☐ 10th ☐ 11th ☐ 12th ☐ College ☐ Other

1. Write your response to each statement (i.e., 1, 2, 3, 4, or 5) in each of the blanks. 2. Add up the scores under each column. Place the result on the line under each column. 3. Divide the score by the number of statements in each column to get the average for each subscale. 4. Calculate the average for the inventory by adding up the subscale scores and dividing by 30. 5. Compare your results to those shown below.
6. Discuss your results with your teacher or tutor.
-

Global Problem- Support Overall Reading Strategies Solving Strategies Reading
 Strategies (GLOB Subscale) (PROB Subscale) (SUP Subscale)

- | | | | | | | |
|-----------|-----------|-----------|------------|-----------|-----------|-----------|
| 1. _____ | 8. _____ | 2. _____ | GLOB _____ | 3. _____ | 11. _____ | 5. _____ |
| 4. _____ | 13. _____ | 6. _____ | PROB _____ | 7. _____ | 16. _____ | 9. _____ |
| 10. _____ | 18. _____ | 12. _____ | SUP _____ | 14. _____ | 21. _____ | 15. _____ |
| 17. _____ | 27. _____ | 20. _____ | | | | |
| 19. _____ | 30. _____ | 24. _____ | | | | |
| 22. _____ | 28. _____ | | | | | |
| 23. _____ | | | | | | |
| 25. _____ | | | | | | |
| 26. _____ | | | | | | |
| 29. _____ | | | | | | |

_____ GLOB Score _____ PROB Score _____ SUP Score _____ Overall Score _____

GLOB Mean _____ PROB Mean _____ SUP Mean _____ Overall Mean _____

KEY TO AVERAGES: 3.5 or higher = High 2.5 – 3.4 = Medium 2.4 or lower = Low

INTERPRETING YOUR SCORES: The overall average indicates how often you use reading strategies when reading academic materials. The average for each subscale of the inventory shows which group of strategies (i.e., global, problem-solving, and support strategies) you use most when reading. With this information, you can tell if you are very high or very low in any of these strategy groups. It is important to note, however, that the best possible use of these strategies depends on your reading ability in English, the type of material read, and your purpose for reading it. A low score on any of the subscales or parts of the inventory indicates that there may be some strategies in these parts that you might want to learn about and consider using when reading (adapted from Oxford 1990: 297- 300).

APPENDIX D

INTERVIEW 1 SEMI-STRUCTURED QUESTIONS: THEME-LITERACY EXPERIENCES

1. Tell me about your educational background in kindergarten through twelfth grades.
(Schools? Where? Teachers? Classes?)
2. Describe the reading foundation that you received in your home. Was education valued in your home?
3. What languages did you speak growing up? What languages do you speak now?
4. Tell me about the classes that you took in high school (names and levels).
5. What types of texts did you read at home (growing up)?
6. What English classes did you take in middle and high school? Levels?
7. What texts do you remember reading in middle and high school?
8. How was reading taught in your elementary, middle, and high school classes?
9. What else would you like to tell me about educational experiences?
10. Describe a classroom where reading was interesting. What did the teacher do? What did you do?
11. Would you say that you feel well prepared for college reading and your current classes based on the instruction that you were given in high school? Why or why not?
12. Have the reading assignments that you have recently completed been similar to what you learned in high school?
13. Tell me about your most challenging class and why it was challenging.

APPENDIX E

INTERVIEW 2 SEMI-STRUCTURED QUESTIONS: THEME-READING PROCESSES AND STRATEGIES

1. Have you ever learned any reading strategies that are specific for certain content areas (example: How to read a social studies text)?
2. Why are you in this developmental reading class and what do you hope to learn?
3. Describe a time when you were engaged in your reading.
4. Tell me about your experience taking the MARSI. Were any of the questions or your answers surprising?
5. Are your TSIA scores a good reflection of your abilities? Why or why not?
6. Describe the reading comprehension strategies that you use and where you learned them.
7. Are there any comprehension strategies that you use specifically in your content area/core classes?
8. Do you consider yourself an engaged reader? If so, when are you engaged in reading? If not, why aren't you engaged in reading? What might help you become engaged?
9. Describe how you felt when you took the Bader Reading and Language Inventory. How do you feel about reading aloud? Were you surprised about your scores in any areas?
10. Describe how you connect with a challenging text.
11. In your opinion, what subject area has the most challenging texts and why?
12. Tell me about the reading artifacts that you have provided. What class were these assignments for? How do they show your reading strategies?
13. How might your answers to the MARSI at the end of this class be different from your answers at the beginning of this class?

14. What do you know about metacognition? How do you use metacognitive strategies when you read?
15. What is your major? What path led you to that? What do you know about literacies in your discipline?

APPENDIX F

INTERVIEW 3 SEMI-STRUCTURED QUESTIONS: THEME-ATTITUDE TOWARD READING

1. Do you like to read? (If yes—what do you like to read? If no—why not?)
2. Do you consider yourself a proficient reader? Why or why not?
3. Tell me what you have learned in this class and how it has helped you in your core classes.
4. Describe your feelings about or your attitude toward reading.
5. What reading skills do you think you need to improve? Are you confident reading in all disciplines? Please explain.
6. How have you grown as a student this semester?
7. Tell me about your digital and outside of school literacies. Do you prefer books or other media when reading?
8. Tell me about your career goals.
9. Did you learn what you hoped to learn in this developmental reading class? Please explain.
10. What have you learned while participating in this study?

APPENDIX G

CODE NAMES AND DESCRIPTIONS

Name	Description
Attitudes Toward Reading	participants' feelings about reading in general
Attitudes Toward Reading\books	participants' use of books or other reading materials such as magazines, newspapers, etc.
Attitudes Toward Reading\digital literacies	participants' use of computers or technology-based ways to read and access information
Attitudes Toward Reading\likes reading	participants' descriptions of finding enjoyment in reading
Literacy Experiences	participants' descriptions of their history in regard to reading and writing
Literacy Experiences\college reading	participants' experiences related to college-level reading and reading classes
Literacy Experiences\developmental class	participants' discussions about their developmental classes (classes designed to support students and prepare them for college learning)
Literacy Experiences\early years	participants' recollections of their years prior to kindergarten
Literacy Experiences\elementary school	participants' descriptions of experiences in kindergarten through fifth grades

Literacy Experiences\frustrations	participants' descriptions of experiences at school that were challenging or disappointing
Literacy Experiences\high school	participants' descriptions of experiences in grades 9-12
Literacy Experiences\leveled classes and special programs	participants' descriptions of classes such as pre-AP (advanced placement), AP, or dual enrollment and programs such as SPED (special education), RtI (Response to Intervention), etc.
Literacy Experiences\lower scores	participants' scores on a test that are below the required score or the grade-level score
Literacy Experiences\math	relating to the participants' math testing or math classes
Literacy Experiences\middle school	participants' experiences in grades 6-8
Literacy Experiences\negative experiences at school	participants' experiences at school that were unpleasant or negative
Literacy Experiences\negative experiences at school\stress and anxiety and STAAR testing	relating to participants' stressful or anxious feelings about STAAR (Texas state-mandated testing for school-aged students)
Literacy Experiences\positive experiences	relating to the participants' happy or positive experiences
Literacy Experiences\science	having to do with the participants' science texts or

	science class
Literacy Experiences\TSI	having to do with the participants' TSI/TSIA (Texas Success Initiative Assessment): an assessment in the state of Texas that is designed to determine college readiness and is used for placing students into college developmental classes
Literacy Experiences\writing	related to participants' writing assignments, writing tests, or writing classes
Personal	participants' descriptions of their unique life stories, including their past experiences and future goals
Personal\career goals	participants' future occupation goals
Personal\confidence	participants' self-assurance or believing in themselves
Personal\family as a support system	participants' descriptions of family members who support them emotionally and/or financially
Personal\family as a support system\family values education	the participant's family regards education as an important factor or a priority
Personal\family issues	participants' descriptions of family problems such as divorce, financial troubles, etc.
Personal\family issues\moved	participated moved to a different school or home

Personal\jobs	work done by participants
Personal\lack of confidence	participants' doubts or lack of belief in themselves
Personal\languages spoken	different languages spoken by the participant
Personal\mental health issues\nerves	participants' descriptions of nervousness or text anxiety
Personal\personality	notes relating to the participants' personalities
Personal\tutoring	participants' use of the free tutoring that was offered to them for this study
Reading Comprehension	understanding of reading materials as described by the participants
Reading Comprehension\Other Comprehension Elements	participants' descriptions of other elements/methods used to understand text
Reading Comprehension\Other Comprehension Elements\comprehension	participants' understanding of what they read
Reading Comprehension\Other Comprehension Elements\content area subject or content areas or specific disciplines and disciplinary literacies	participants' descriptions of literacies related to
Reading Comprehension\Other Comprehension Elements\engagement and/or interested in a text	participants' descriptions of being connected with

Reading Comprehension\Other Comprehension Elements\fluency	evidence of participants' reading with appropriate speed, accuracy, and expression
Reading Comprehension\Other Comprehension Elements\metacognition	participants' self-awareness regarding how they think and process information as they read
Reading Comprehension\Reading Strategies from Artifacts	evidence of reading comprehension strategies in the participants' artifacts
Reading Comprehension\Reading Strategies from Artifacts\annotations	evidence of marginal notes to explain, describe, or summarize in the participants' notes (artifacts)
Reading Comprehension\Reading Strategies from Artifacts\Cornell-style notes	evidence of a method of notetaking (which includes sections for a title, questions or definitions, main ideas, and a summary) in participants' notes (artifacts)
Reading Comprehension\Reading Strategies from Artifacts\definitions	evidence of written meanings of words in participants' notes (artifacts)
Reading Comprehension\Reading Strategies from Artifacts\highlighting	evidence of using a highlighter to make important material stand out on the page in participants' notes (artifacts)
Reading Comprehension\Reading Strategies from Artifacts\underlining	evidence of underlining text in reading passages in participants' notes (artifacts)
Reading Comprehension\Reading	methods used to comprehend text as described in

Strategies from the MARSI	the MARSI
Reading Comprehension\Reading Strategies from the MARSI\MARSI	Metacognitive Awareness of Reading Strategies Inventory: a survey that measures students' perceptions on how they utilize reading strategies
Reading Comprehension\Reading Strategies from the MARSI\use of global reading strategies	participant use of global reading strategies (as defined by the MARSI)
Reading Comprehension\Reading Strategies from the MARSI\use of problem-solving strategies	participant use of problem-solving strategies (as defined by the MARSI)
Reading Comprehension\Reading Strategies from the MARSI\use of support strategies	participant use of support strategies (as defined by the MARSI)

APPENDIX H

CODES, NUMBER OF REFERENCES, AND NUMBER OF ITEMS CODED

Codes	Number of coding references	Number of items coded
Attitudes Toward Reading\books	28	7
Attitudes Toward Reading\digital literacies	10	5
Attitudes Toward Reading\likes reading	20	11
Literacy Experiences\college reading	13	6
Literacy Experiences\developmental class	22	13
Literacy Experiences\early years	9	2
Literacy Experiences\elementary school	13	4
Literacy Experiences\frustrations	9	3
Literacy Experiences\high school	12	5
Literacy Experiences\leveled classes and special programs	26	6
Literacy Experiences\lower scores	8	4
Literacy Experiences\math	7	5

Literacy Experiences\middle school	10	5
Literacy Experiences\negative experiences at school	8	3
Literacy Experiences\negative experiences at school\stress and anxiety and STAAR testing	8	5
Literacy Experiences\positive experiences	22	6
Literacy Experiences\science	10	9
Literacy Experiences\TSI	11	9
Literacy Experiences\writing	12	9
Personal\career goals	13	9
Personal\confidence	17	8
Personal\family as a support system	17	6
Personal\family as a support system\family values education	4	4
Personal\family issues	12	5
Personal\family issues\moved	10	5
Personal\jobs	8	6
Personal\lack of confidence	10	5

Personal\languages spoken	12	6
Personal\mental health issues	4	2
Personal\mental health issues\nerves	4	4
Personal\personality	11	5
Personal\tutoring	4	4
Reading Comprehension\Other Comprehension Elements\comprehension	29	13
Reading Comprehension\Other Comprehension Elements\content area and disciplinary literacies	12	7
Reading Comprehension\Other Comprehension Elements\engagement	11	4
Reading Comprehension\Other Comprehension Elements\fluency	8	7
Reading Comprehension\Other Comprehension Elements\metacognition	4	4
Reading Comprehension\Reading Strategies from Artifacts\annotations	10	5
Reading Comprehension\Reading Strategies from	5	2

Artifacts\color-coding		
Reading Comprehension\Reading Strategies from Artifacts\Cornell-style notes	10	6
Reading Comprehension\Reading Strategies from Artifacts\definitions	14	9
Reading Comprehension\Reading Strategies from Artifacts\highlighting	25	12
Reading Comprehension\Reading Strategies from Artifacts\underlining	7	6
Reading Comprehension\Reading Strategies from the MARSI\MARSI	12	7
Reading Comprehension\Reading Strategies from the MARSI\use of global reading strategies	8	4
Reading Comprehension\Reading Strategies from the MARSI\use of problem-solving strategies	15	8
Reading Comprehension\Reading Strategies from the MARSI\use of support strategies	13	6