CULTURALLY RESPONSIVE PEDAGOGY IN THE ADVANCED PLACEMENT
CLASSROOM: A CASE STUDY

by

Tracy Miller Maguire
A Dissertation
Submitted to the
Graduate Faculty
of
George Mason University
in Partial Fulfillment of
The Requirements for the Degree
of
Doctor of Philosophy
Education

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Date: April 27, 2017

Spring Semester 2017
George Mason University
Fairfax, VA
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Dedication

This dissertation is dedicated to my daughters, Fiona, Ava, and Keira. You make me want to be the best version of myself. Always believe that you can accomplish anything you set your mind to, and that I will always be there to support and love you.
Acknowledgements

Most of all, I would like to thank my dissertation chair, Dr. Beverly Shaklee. Your guidance, encouragement, and unflagging belief in me were instrumental in helping me to see this journey through. Thank you for supporting me in my academic life and in my “real life.” These years have been full of highs and lows, both in my dissertation research and in life, in general. “Thank you” seems inadequate for all you have done to help me achieve this accomplishment, but I am eternally grateful. I also thank my committee members, Dr. Gary Galluzzo and Dr. April Mattix-Foster. Dr. Galluzzo, you led me to my interest in the Excellence Gap and always had an open door to listen to me think out loud and explore my ideas. You challenged me to think more deeply and encouraged me to push myself throughout my PhD program. I am proud to have you on my committee. Dr. Mattix-Foster, thank you for your positivity and encouragement, always reminding me to look for the light at the end of the tunnel and watch it grow brighter. That thought kept me going through many late nights when I didn’t think I could focus on one more article or revise one more page. I feel very lucky to have had such an amazingly supportive and accomplished committee. Thank you all.

I would also like to thank my wonderful family and amazing friends who picked up the slack while I pursued my dream. There are truly too many people to mention here who have had a hand in this accomplishment. I could not count how many extra carpools, playdates, dinners, sleepovers, and babysitting stints you all did so that I could write and my children could still have rich and full lives. I could not have accomplished this without your kindness and generosity. Thank you to the Maguire family, especially Margaret for all the care and love you gave to my children (and all the dinners you fed us), and Kevin, for all your help. Thank you to my cherished St. James family: Amy and Vince, Michelle and AJ, and Monica and Pete. I am so grateful to you all for your help and support these past few years. Thank you to Mary, my life-long friend and my biggest cheerleader, for giving me a quiet place to write and the refuge of friendship. I am blessed to count many of my teaching colleagues as friends, as well, and I thank you all for your support and encouragement. I would especially like to thank my partner-in-crime, Anne, for being unfailingly supportive and generous. To Anne, Bobbi, Megan, and Mariya, you are the most amazing women, and I am honored to work with you, learn from you, and laugh with you every day.
A special word of thanks to my parents. From the time I was a child, you have believed in me and encouraged me to reach for my dreams. Because of that, I believed in myself. Thank you for that priceless gift. I hope I can pass it on to my daughters. Thank you for all the love and support you have given me and my family. I love you both very much and I hope I have made you proud.

Finally, thank you to my husband, John, and to our children, Fiona, Ava, and Keira. I know this journey has not always been easy. You all made sacrifices so that I could achieve this goal, and I am so grateful to you for allowing me to make this dream come true. Fiona, thank you for your maturity and responsibility. Ava, thank you for your humor and tender heart. Keira, thank you for reminding me that dreams do come true and miracles do happen. John, you are my rock and my best friend. You never complained, not once, even though I’m sure you made more sacrifices than anyone. You picked me up when I doubted myself, dried my tears, and always knew the right thing to say to get me to keep fighting. There are no words for how grateful I am to you and how thankful and honored I am to be your wife. To my beloved family, thank you for never giving up on me; I hope I have made you proud, too.
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List of Abbreviations

Culturally responsive pedagogy................................................................. CRP
Racially, culturally, ethnically, and linguistically diverse...........................RCLED
Advanced Placement.................................................................................. AP
English learner ........................................................................................ EL
Abstract

CULTURALLY RESPONSIVE PEDAGOGY IN THE ADVANCED PLACEMENT CLASSROOM: A CASE STUDY

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George Mason University, 2017
Dissertation Director: Dr. Beverly Shaklee

There exists in our schools an excellence gap: an achievement gap at the highest levels of academic achievement between White and racial, ethnic, and linguistic minority students. Previous research has not looked at how culturally responsive pedagogy can be used to eliminate the Excellence Gap in Advanced Placement (AP) classes in order to create equity in achievement in AP. This dissertation examines the culturally responsive beliefs and practices of AP teachers whose racially, culturally, linguistically, and ethnically diverse (RCLED) students have historically been successful on the Advanced Placement (AP) end-of-course exam. The research questions for this study were: 1. What are the educational and professional development experiences of teachers of AP courses who have shown consistent success with Advanced Placement racially, culturally, linguistically, and ethnically diverse (RCLED) students? (“Success”= a score of 3+ on AP exam); 2. What are these teachers’ beliefs about teaching Advanced Placement
RCLED students?; and, 3. In what ways do AP teachers who are successful with AP RCLED students exhibit aspects of culturally responsive pedagogy in their practice? I conducted a case study of five AP teachers using semi-structured interviews and classroom observations using the *Culturally Responsive Instruction Observation Protocol (CRIOP), (3rd Edition)* (Powell, Cantrell, Correll & Malo-Juvera, 2014). I found that the most salient factor of culturally responsive pedagogy for the teachers in this study to help their AP RCLED students reach success was the creation of caring and effective relationships between the teacher and his or her students. Other effective components of CRP in the AP context are also discussed. Teachers identified both student-related and school-related factors that they believe influence the success of RCLED students in AP courses. Finally, implications of this research and recommendations for school leaders, AP teachers, and AP program coordinators are offered.
Chapter One

In 1954, The Supreme Court of United States, in the landmark Brown v. The Board of Education decision, rejected the idea that the nation’s public schools could provide separate but equal education to its diverse student population (Ferguson & Mehta, 2004). Today, more than sixty years later, our schools continue to struggle with the mandate set forth by Brown: to provide equity in public education for all children. Countless initiatives aimed at this goal have resulted in some measurable progress, but significant achievement gaps remain at all levels of public education (Bohrnstedt, Kitmitto, Ogut, Sherman, & Chan, 2015; Bradbury, Corak, Waldfogel, & Washbrook, 2015; Ferguson, 2007; Ferguson & Mehta, 2004; Howard, 2010; Olszewski-Kubilius & Clarenbach, 2012; Plucker, Burroughs, & Song, 2010; Plucker, Hardesty, & Burroughs, 2013; Reardon, 2016; Smith, Crawley, Robinson, Cotman, Swaim, & Strand, 2011).

Demographic trends in the United States indicate that the issue of achieving educational equity for all students has never been more important for the future of our nation. According to projections from the U.S. Department of Education’s National Center of Education Statistics (NCES), enrollment of minority students in the nation’s elementary and secondary schools is expected to continue to increase through the year 2020, while the enrollment of White students is expected to decrease (Hussar & Bailey, 2011). A recent report from the National Center of Education Statistics stated that between the years 2000 and 2013, White student enrollment in U.S. public schools decreased from 62% to 53% (Musu-Gillette et al., 2016). Maxwell (2014) cited
demographic statistics from the U.S. Department of Education indicating that in 2014, for the first time ever, minority student public school enrollment exceeded White student enrollment. Meanwhile, the number of English learners (ELs) in U.S. public schools has also risen significantly over the past decade and continues to rise (Aud et al., 2013). Citing NCES demographic statistics, Taylor, Kumi-Yeboah, and Ringlaben (2016) reported that there are 10.9 million students in the U.S. who speak a language other than English at home.

According to Ferguson (2007), the racially, culturally, ethnically and linguistically diverse groups of students who now are overrepresented among low-achievers in our schools and underrepresented among high achievers will constitute the majority of workers and citizens in our country. Indeed, while racial, ethnic, and linguistic diversity in U.S. public schools is on the rise, minority students continue to be underrepresented in programs for gifted and advanced learners, and, even when minority students are given the opportunity to learn at advanced levels, achievement gaps persist (College Board, 2014; Moore & Slate, 2008; Whiting & Ford, 2009). Ford (2014) reported that Black students continue to be the most underrepresented subgroup in programs for gifted education followed by Hispanic students, resulting in de jure segregation in programs aimed at serving our nation’s brightest children. The obligation to seek “excellence with equity” (Ferguson, 2007), therefore, is manifest.

Meanwhile, as diversity in the student body continues to increase, diversity in the teaching force is decreasing (Kiryio, Thirumurthy, McNulty, & Brown, 2009). According to Taylor et al. (2016), the NCES reports that 83.5% of the nation’s teachers are White,
while only 6.6% of teachers are Black, and 6.9% Hispanic. While these statistics have a variety of implications, they have special significance for the persistent achievement gaps in many U.S. schools, including those at advanced levels, known as Excellence Gaps (Plucker et al., 2010). Villegas and Irvine (2010) stated that recruiting a more diverse teaching force is a significant piece of the puzzle for closing achievement gaps between White students and racially, culturally, ethnically, and linguistically diverse (RCLED) students. One reason for this is that teachers of color have the potential to make cultural connections with RCLED students, which leads to better academic achievement for these students (Villegas & Irvine, 2010).

However, given the national statistics regarding the teaching force (mostly White) and the increasing diversity of the student body, we cannot rely solely on the effort to recruit more teachers of color as the solution to the inequities that exist for diverse students in programs for high achieving students. On the contrary, we, as educators, are obligated to seek methods to create equitable opportunities and educational outcomes for those students who will lead the way to the future of our nation and our world. One vehicle that researchers points to in order to accomplish this goal (especially given the common cultural mismatch between teachers and the increasingly diverse student populations) is for teachers to implement culturally responsive pedagogy (Gay, 2010; Ladson-Billings, 2009; Phuntsog, 1999; Powell & Rightmyer, 2011).

I designed this qualitative case study to address this very issue—how can we, in practical terms, seek ways to create opportunity and equity for high-potential racially, culturally, linguistically, and/or ethnically diverse (RCLED) students at advanced levels
in our public high schools? This study describes the characteristics, beliefs, and culturally responsive pedagogy of Advanced Placement (AP) teachers whose racially, culturally, linguistically, and/or ethnically diverse (RCLED) students have been successful on the end-of-course AP exam. The emphasis is on understanding, through interviews and observations, what characteristics the teacher participants have in common and on the ways in which these teachers exhibit culturally responsive pedagogy in their classrooms. I contend that certain culturally responsive teacher characteristics, beliefs, and practices may help to close the Excellence Gap in AP programs. In identifying such characteristics and practices, teacher educators, professional developers, and AP program coordinators can identify those teachers who should be recruited into the AP program and develop these characteristics and pedagogical practices in their current or potential AP teachers in order to close the Excellence Gap in AP programs.

**The Significance of the Problem**

According to the National Association for Multicultural Education (NAME) (2003), multicultural education is a concept and philosophy rooted in social justice and human rights. Multicultural education upholds the belief that students in the 21st century must be prepared to participate in a diverse and interdependent world, and that schools play an integral role in developing key values such as freedom, equality, justice and respect for all people (NAME, 2003). This philosophy of education requires that teachers are culturally competent and able to draw on their students’ diverse perspectives and experiences as the basis for pedagogy (NAME, 2003).
In response to the Brown v. The Board of Education decision and subsequent desegregation, multicultural education first arose from the ethnic studies movement that emerged from the Civil Rights Era of the 1960s (Banks, 2013, Gay, 1983; Sleeter, 1996). Cultural difference theory built on the foundation of ethnic and multiethnic studies, and gained momentum throughout the 1970s, 1980s, and 1990s (Banks, 2013). The evolving field of multiethnic or multicultural education called on schools to educate children from diverse cultures in ways that respect their unique strengths and promoted the use of teaching strategies that are responsive to diverse cultures (Banks, 2013, Gay, 1983). This pedagogical philosophy was called “equity pedagogy” and, later, “culturally responsive teaching,” “culturally congruent,” “culturally relevant” and “culturally appropriate” pedagogy (Banks, 2013; Harmon, 2012). Beginning in the 1980s, the scope of multicultural education broadened to include gender, social class, and exceptional students, such as those receiving special education and gifted education services (Sleeter, 1996; Banks, 2013). Today, multicultural education encompasses matters related to these and other underrepresented and marginalized groups, such as linguistic minorities, religious minorities, and LGBTQ+ students (Banks, 2013).

The inequities in gifted education for racially, culturally, linguistically, and ethnically diverse (RCLED) students have been well-documented (Ford, 2014; Ford, Grantham & Whiting, 2008; Harris, Plucker, Rapp, & Martinez, 2009; Moon & Brighton, 2008; National Research Council, 2002; Neumeister, Adams, Pierce, Cassady, & Dixon, 2007; Peters & Engerrand, 2016; de Wet, 2006). From a historical perspective, Landrum, Katsiyannis, and DeWaard (1998) found that, in 1996, less than 1 to 5 per cent of
minority students nationwide were identified for gifted services, and little progress has been made since (Milner & Ford, 2007). Ford (2011) reported that while the representation of minority students in schools has increased over the past twenty-five years, with the exception of Asian students, the representation of minority students in gifted education programs has not increased, and in some cases, has actually declined. More recently, the U.S. Department of Education Office for Civil Rights 2013-2014 Civil Rights Data Collection (CRDC) report (2016) stated that Black and Latino students accounted for 28% of students enrolled in programs for gifted and talented students, yet they made up 42% of students enrolled in schools that offer such programs. The report also stated that English learners made up 11% of students enrolled in schools that offer programs for gifted and talented students, yet less than 3% of students who were in these gifted programs were English learners (U.S. Department of Education, 2016).

Amid the persistent challenges, then, to achieving the mandate of “excellence with equity” are the achievement gaps that exist among those students who achieve at the highest levels. These gaps are known as Excellence Gaps (Plucker & Peters, 2016; Plucker et al., 2010). Grantham (2012) stated that while we must continue to encourage and grow programs for high potential students which promote educational excellence, we must at the same time ensure that these programs offer opportunities for excellence to underrepresented student groups, as well. He pointed to issues such as low academic expectations for students of color, fewer rich learning opportunities for underrepresented student groups, and unchallenging academic environments as some that continue to plague the quest for excellence and equity in education for high-potential students.
(Grantham, 2012). Likewise, Villegas and Davis (2008) pointed out that teacher expectations have a significant effect on teacher-student interactions and classroom interactions and can also lead to inequity in the classroom for racially and ethnically different students. The problem of creating both excellence and equity in education has led to a plethora of research focusing on multiculturalism and the importance of teacher cultural competence (Ford, 2011). Through this study, I seek to add to the existing literature base by examining selected AP teachers’ culturally responsive pedagogies and beliefs about high-potential diverse students. The findings of this study will help education stakeholders to understand how the purposeful recruiting of culturally competent AP teachers and ongoing professional development in culturally responsive pedagogy can help to close excellence gaps for historically underrepresented diverse students in advanced levels of secondary schooling.

**The Significance of the Excellence Gap**

Excellence gaps have been overshadowed in recent years due to the intense national focus on ensuring all students meet minimum competency requirements (Finn & Wright, 2015; Hardesty, McWilliams & Plucker, 2014; Plucker & Peters, 2016; Plucker et al., 2010) and research in the area of excellence gaps is comparatively new (Rutowski, Rutowski & Plucker, 2012). However, while the attention given to minimum-competency achievement gaps is necessary and worthwhile, such single-mindedness often leaves high-achieving and high-potential racial, linguistic, and ethnic minority students to fend for themselves (Plucker & Peters, 2016). Several researchers (Loveless, 2008; Plucker & Peters, 2016; Plucker et al., 2010; Plucker et al., 2013; Rutowski et al., 2012; Xiang,
Dahlin, Cronin, Theaker & Durant, 2011) have analyzed recent national and international data that support the existence and persistence of excellence gaps between White and/or middle to high socioeconomic classes of students and their minority and/or low socioeconomic class peers. I expand upon the research into excellence gaps in Chapter Two.

Researchers have also pointed out how the Excellence Gap in K-12 leads to significant disparities in higher education (Hardesty et al., 2014; Finn & Wright, 2015). Hill and Winston (2010) found that a significant gap exists for low-income, high-ability students at the nation’s most selective colleges and universities. They noted that only 10% of students at these prestigious institutions come from the lowest 40% in family economic status.

The implications for excellence gaps go beyond schooling in and of itself. Indeed, these persistent gaps at the highest levels of achievement have implications for the future of the nation and the world. While schools focus on ensuring all students meet minimum competency standards in the age of rigid accountability requirements set out by federal elementary and secondary education laws, they leave even our best students ill-prepared for the requirements of the interdependent, global economy of the future (Wagner, 2008). The fastest growing groups in our society are also those that rarely score in the top tier in achievement assessments, a fact that has larger societal implications such as dim prospects of innovation and advancement as well as widening economic disparities within society at large (Hardesty et al., 2014). Students identified as advanced or gifted (typically students in the racial and linguistic majority) are met with the most
challenging and complex educational goals such as critical thinking, curiosity, and strong communication (Ford & Grantham, 2003), while minority students too often go unchallenged (Grantham, 2012). Given the demographic trends in the United States cited earlier, it is more and more important for the continued growth and advancement of our communities and our nation to turn our attention in education to both increasing the opportunities for underrepresented student populations to access advanced level classes as well as to increasing these students’ success in these classes.

**The AP Excellence Gap**

One window into excellence gaps is through Advanced Placement (AP) courses. Advanced Placement courses are rigorous, college-level courses, designed in cooperation with college and university professors, offered to high school students in public and private schools. By successfully passing the end-of-course AP exam, high school students in AP courses “demonstrate…that they are ready for the challenge of higher education and can, in turn, contribute new thoughts and ideas to the communities at their colleges and universities” (College Board, 2012, p. 3). In short, success in AP courses and on AP exams is an important litmus test for a student’s ability to succeed in college and offers a variety of benefits for students, including the potential to earn college credits while still in high school and a possible GPA boost offered by many schools as an effort to offset the increased rigor of AP courses, as well as eligibility for various awards and college scholarships (College Board, 2014; Kyburg, Hertberg-Davis, & Callahan, 2007; Moore & Slate, 2008). Furthermore, the College Board reports that students who earn a score of three or better on an AP exam while in high school do better in college and have a better
college graduation rate than those students who did not take an AP course or score well on the AP exam while in high school (College Board, 2014). In general, then, students who choose to take Advanced Placement courses are typically high-achieving, college-bound students who seek challenge and rigor.

Ford (2011) pointed out that, “despite the Brown v. Board of Education (1954) ruling, gifted education and AP classes remain quite segregated” (p. 31). Gaps in both AP enrollment and AP exam scores exist between White and racially, culturally, linguistically, and ethnically diverse (RCLED) minority students (College Board, 2012; Moore & Slate, 2008; Whiting & Ford, 2009). The U.S. Department of Education Office for Civil Rights (2016) reported that, nationwide, Black and Latino students accounted for 38% of students in schools that offer Advanced Placement courses in 2013-2014, yet only 29% of students enrolled in at least one AP course were Black or Latino. The report also stated that English learners made up 5% of students enrolled in schools that offer AP courses, yet only 2% of students who were enrolled in at least one AP course were English learners (U.S. Department of Education, 2016). The National Center for Education Statistics (Musu-Gillette et al., 2016) reported that in 2013, 40% of White students earned at least one Advanced Placement or International Baccalaureate credit in the previous four years, while the same was true for only 23% of Black students and 34% of Hispanic students. Ford (2011) cited U.S. Department of Education Office of Civil Rights statistics that showed that AP classes are “even more segregated than gifted education classes” (p. xiv). Whiting and Ford (2009) discussed the underrepresentation of diverse students in AP classes (particularly in AP Science/Technology/
Engineering/Mathematics courses) seen in the College Board’s 4th Annual AP Report to the Nation. Four years later, in The 8th Annual AP Report to the Nation (2012), the College Board acknowledged that RCLED minority students continued to be significantly underrepresented in AP courses nationwide. The most recent report, The 10th Annual AP Report to the Nation (2014), stated that while progress is being made to close equity gaps in AP courses in many states, these gaps are still a persistent challenge nationwide.

At the same time, the College Board (2014) reported that RCLED students are not achieving equity in AP exam achievement. For example, while 14.5% of the 2013 graduating class in the United States were Black/African American, only 4.6% of successful AP exam takers in this graduating class were Black/African American (College Board, 2014). The Department of Education has also noted an Excellence Gap in Advanced Placement classes in the state where I conducted the present study. Hence, though the College Board and school systems have made efforts to improve equity in AP courses, the most current data reveals that opportunity and achievement gaps remain.

Culturally Responsive Teachers as Gap-Closers

The theory of culturally responsive pedagogy (CRP) rests on the belief that the “academic achievement of students from culturally diverse backgrounds will improve if schools and teachers make an attempt to ensure that classroom instruction is conducted on a manner responsive to the student’s home culture” (Phuntsog, 1999, p. 98). The role of the teacher in the arena of student achievement is paramount. After conducting a meta-analysis of over 900 research studies, Hattie (2012) asserted “that teachers’ beliefs and commitments are the greatest influence on student achievement over which we have some
control” (p. 22, emphasis in original). There has been some research linking CRP to student outcomes, including several studies that looked at how CRP affects student learning (Powell, Cantrell, Malo-Juvera, & Correll, 2016; Sleeter, 2012). These studies are elaborated upon in Chapter Two. My study focuses on the characteristics and culturally responsive practices of teachers who are successful in helping diverse students achieve in advanced level classes—the teachers who are the exception to the rule in the historical narrative involving high-potential RCLED students. Ladson-Billings (2009) offers a rationale for studying teachers:

> Looking carefully at the teaching, while offering the teachers as exemplars, provides a useful heuristic for teachers and teacher educators who wish to take on the challenge of being successful with African American [or, in the case of this study, AP RCLED] students (p. 14).

Chenoweth (2009) pointed out that we must find educators who are “getting it done” and learn from them. This is precisely the goal of my study with regard to the Excellence Gap in AP. Once enrolled in advanced level courses, RCLED students must be taught and supported in ways that will lead to successful outcomes (Ford & Grantham, 2003). Since teachers play a significant role in student placement, and ultimately student outcomes, in AP courses, it is important to examine these teachers’ experiences and professional histories, their beliefs about AP RCLED students, and their use of culturally responsive pedagogy as a means of understanding the Excellence Gap.
The Importance of the Study

Ferguson and Mehta (2004) called for a strong research-based effort aimed at uncovering what can be done in the classroom to finally bring to fruition the promise of Brown v. The Board of Education. While there has been significant research into achievement gaps at minimum competency levels (Ferguson, 2007; Howard, 2010; Smith et al., 2011), far fewer researchers have looked at Excellence Gaps (Plucker et al., 2010), especially with regard to the role of the teacher. Likewise, many studies have examined the association between teachers’ perceptions and pedagogy on student access to rigor and programs for advanced students (Ford, 2011; Moon & Brighton, 2008; Neumeister et al., 2007; Villegas & Davis, 2008) including a study done by the College Board relating AP student achievement to teacher characteristics such as professional development (Paek, Braun, Trapani, Ponte, & Powers, 2007). However, few, if any, have studied these phenomena in relation to teachers of AP RCLED students. In addition, there is a need for more research connecting the implementation of culturally responsive pedagogy to student achievement (Sleeter, 2012) and the closing of achievement gaps (Powell et al., 2016). Research has not adequately addressed the issue of how teachers of AP courses can use CRP in their classrooms to work toward narrowing the Excellence Gap for historically underrepresented AP student populations.

The purpose of this investigation, then, was to examine how certain core characteristics and culturally responsive practices of AP teachers may contribute to the narrowing of the AP Excellence Gap at the secondary level using the following research questions:
1. What are the educational and professional development experiences of teachers of AP courses who have shown consistent success with Advanced Placement racially, culturally, linguistically, and ethnically diverse (RCLED) students? (“Success”= a score of 3+ on AP exam)

2. What are these teachers’ beliefs about teaching Advanced Placement RCLED students?

3. In what ways do AP teachers who are successful with AP RCLED students exhibit aspects of culturally responsive pedagogy in their practice?

These research questions provided the framework for investigation in this study. Before turning to the literature base for my study, there are several key terms that are used frequently in this study. Therefore, I will provide clarification and definition of these terms for the reader.

**Definition of Terms**

The following terms are used throughout this research study and are therefore necessary to define:

*Racially, culturally, linguistically, and/or ethnically diverse (RCLED)* - non-White and/or non-native English-speaking students

Note: Griner and Stewart (2012) likewise suggest that the acronym RCLED can be used to refer to “historically underserved groups” (p. 587). While there are many different ways to describe the population of students at the heart of this study, I embrace the idea that the most important focus ought not to be on the terminology used but instead
“on the alleviation of the problems that are denying large segments of disadvantaged populations the right to be recognized for their potential to achieve” (Ford, 2011, p. 5).

*Culturally responsive pedagogy* (CRP)- “Using the cultural characteristics, experiences, and perspectives of ethnically diverse students as conduits for teaching them more effectively” (Gay, 2002, p. 106). CRP is also commonly referred to as culturally relevant pedagogy (Ladson-Billings, 2009), culturally responsive instruction (CRI) (Powell et al., 2016) and culturally responsive teaching (CRT) (Gay, 2010).

*Advanced Placement* (AP)- college-level courses offered in U.S. high schools that are designed and assessed by the College Board (College Board, 2012)

*English learner* (EL)- a student who speaks a language other than English at home and is still acquiring academic proficiency (Echevarria, Vogt & Short, 2014). ELs may include Limited English Proficient (LEP), English as a Second Language (ESL) students (students who receive targeted language development instruction). Also commonly referred to as English Language Learner (ELL).

Other terms, those used less frequently, are defined within the text of this research study.

**Summary**

Education is “a social resource connected with other resources such as jobs, power, and self-determination” (Sleeter, 1996, p. 239). Our increasingly interdependent world requires that our nation prepares its best and brightest students to take on the challenges of the future. This includes the groups that have historically been left out of programs for gifted and high-potential students such as Advanced Placement classes. It is
the responsibility of educational system, and those who work within it, to seek ways in which to close excellence gaps for racially, culturally, ethnically and linguistically diverse students. In this endeavor, we can perhaps finally fulfill our duty to provide excellence for all students, including historically underserved populations of students. This is a debt owed to those who fought for equality in education in the 1950s, a goal yet unrealized.

In Chapter Two, I examine the literature that provides the basis for this study, followed by a discussion of my research methods in Chapter Three. In Chapter Four, I discuss the findings of my research on the culturally responsive beliefs and practices of teachers of successful AP RCLED students. Finally, in Chapter Five I draw conclusions and make meaning from the findings of my research, share recommendations for education stakeholders who wish to close the Excellence Gap in Advanced Placement classes, and offer suggestions for future research in this area.
Chapter Two

In this research study, I examined the characteristics and culturally responsive practices of Advanced Placement (AP) teachers whose racially, culturally, ethnically, and linguistically diverse (RCLED) students have historically been successful on the end-of-course AP exam. My research questions for this study were:

1. What are the educational and professional development experiences of teachers of AP courses who have shown consistent success with Advanced Placement racially, culturally, linguistically, and ethnically diverse (RCLED) students? (“Success” = a score of 3+ on AP exam)

2. What are these teachers’ beliefs about teaching Advanced Placement RCLED students?

3. In what ways do AP teachers who are successful with AP RCLED students exhibit aspects of culturally responsive pedagogy in their practice?

In Chapter One, I laid the foundation for this study and its importance in the field of education research. In this chapter, I discuss the literature base that informed my research. The literature related to this study is garnered from several areas of education research. Research related to excellence gap establishes the foundation for the problem. I develop the foundation for the problem further by looking to research on the historic underrepresentation of RCLED students in programs for gifted and academically
advanced students. I follow this discussion with literature focused on diverse students’ participation and success in the College Board’s Advanced Placement program. Next, I look to research on teacher beliefs and behaviors in order to establish the importance of the role of the teacher in student achievement. Finally, I discuss the theoretical framework of culturally responsive pedagogy as a context for success for high-potential RCLED students.

Situated within the larger field of achievement gaps, research in the area of excellence gaps is comparatively new (Rutowski et al., 2012). However, several important studies (Loveless, 2008; Plucker et al., 2010; Plucker et al., 2013; Rutowski et al., 2012; Xiang et al., 2011) have brought recent attention to this issue. The significance of culturally responsive pedagogy for diverse students’ achievement (Gay, 2010; Ladson-Billings, 2009; Powell & Rightmyer, 2011) and the underrepresentation of diverse students in programs for the gifted (Ford, 2011; Grantham, 2012) have been well-documented phenomena within the field of education research. By bringing together research from these fields, I establish a foundation for this study in which I looked at how these phenomena are related in the context of AP RCLED student success.

The Excellence Gap

Equity and excellence? Former U.S. Secretary of Health, Education, and Welfare and Presidential Medal of Honor recipient John W. Gardner asked the question of whether education can be both excellent and equitable in 1961. This question remains as salient in education today as it was then. Since the advent of the standards movement, education stakeholders have been devoted to raising achievement for American students,
particularly those students commonly left behind, including Hispanic, Black, English language learning children, and children of poverty. But, while these students have made gains in meeting minimum proficiency standards, what has happened for those students who are high-achievers, those who score in the top 10% on tests of achievement? After all, in a society such as ours, the education system should seek to raise the achievement level for all, while still compelling those at the top tiers to attain academic excellence, no matter their background or social status (Allen, Shelby, Suarez-Orozco, Rebell & Hudes, 2016). However worthy a goal, it is not yet one we have attained.

Several research studies have examined excellence gaps through a variety of lenses. Hardesty et al. (2014) stated that excellence gaps in the United States are both significant and growing, even in states where proficiency achievement gaps are shrinking. Loveless (2008) stated that National Assessment of Education Progress (NAEP) data showed the performance of high-achieving students has largely stagnated since the passage of the No Child Left Behind Act of 2001 (NCLB, 2002). Meanwhile, according to Plucker et al. (2010), NAEP data also showed that “excellence achievement gaps among different racial groups, high- and low-socio-economic status, different levels of English language proficiency, and gender groups have widened… ” (p. 4). In fact, even when using states’ standards-based assessments, Plucker et al. (2010) found that although most states reported greater numbers of students performing at advanced levels overall between 2005 and 2007, most states also experienced widening excellence gaps during this same time period. In a follow-up report, Plucker et al. (2013) reported that excellence gaps as examined using NAEP data either widened or closed very little
between 2007 and 2011. For example, using NAEP data on grade eight math assessments, the percentage of White students scoring in the advanced range increased by 5.9 percentage points between 1996 and 2011; the percentage of Black students scoring in the advanced range on grade eight math, however, only increased by 1.4, while the percentage of Hispanic students scoring at the advanced level increased by 1.9 during this same time period (Plucker et al., 2013). These data represent a widening of the Excellence Gap for this measure, since the percentage of White students scoring at the advanced level grew at a faster rate than did the number of Black and Hispanic students scoring in the advanced range (Plucker et al., 2013). The report stated that excellence gaps for English learners also continued to grow similarly during this time period (Plucker et al., 2013).

Similarly, Bromberg and Theokas (2013) examined NAEP data in math and reading for fourth and eighth grades between 2003-2011. They looked for achievement gaps at all levels, including the performance at the top and bottom 10% of students for various groups. Overall, the authors reported some positive trends in excellence gaps narrowing over this time period (Bromberg & Theokas, 2013). However, they found that the gaps between White and African American students and White and Hispanic students at the 90th percentile were still larger than the achievement gaps found at the 10th percentile for these same groups (Bromberg & Theokas, 2013). These findings echoed those of Plucker et al. (2013), underscoring the persistent nature of excellence gaps using NAEP math and reading data as the measure.
Using a different lens with which to examine excellence gaps, McMurrer and Kober (2011) analyzed high school math and English language arts testing data used for NCLB reporting. They studied data from all 50 states and the District of Columbia. After examining data from at least three consecutive years, the researchers looked for achievement trends in the state testing data. The researchers looked at testing averages, percentage of students scoring at proficient levels, and percentage of students scoring at advanced levels. They also examined trends for student groups, including African American, Asian American, Native American, Latino, and White students, as well as trends for male and female students, and low-income versus non-low-income students. Of particular pertinence to this study is McMurrer and Kober’s (2011) finding that achievement gaps between subgroups at advanced levels frequently widened, even though achievement gaps at proficient levels generally narrowed. This study offered another layer of evidence to reiterate the existence and persistence of excellence gaps in U.S. public schools.

Hence, “the increase in students performing at advanced levels on state tests is not being shared by all subgroups of students” (Plucker et al., 2010, p. 21). Based on these data, the Excellence Gap is a persistent achievement gap in U.S. schools. National achievement data point to the continued relevance of Gardner’s question about our schools’ ability to provide excellence and equity. As Finn and Wright (2015) pointed out, there is an unmistakable problem when only three per cent of Hispanic and African American students are even represented among the NAEP top scorers, in any subject, at any level. There is concern that high-achieving students are not making strong relative
gains in achievement; however, the much greater concern is the oft-overlooked gap between White students and RCLED students in this category. It is not sufficient to be excellent; we must also seek equality in excellence.

**Underrepresentation of Racially, Culturally, Linguistically, and Ethnically Diverse (RCLED) Students in Gifted Education**

The historical underrepresentation of racially, culturally, linguistically, and ethnically diverse (RCLED) students in programs for gifted students nationwide is well-known (de Wet, 2006; Harris et al., 2009; Moon & Brighton, 2008; National Research Council, 2002; Neumeister et al., 2007; Peters & Engerrand, 2016). Landrum et al. (1998) found that, in 1996, less than one to five per cent of minority students nationwide were identified for gifted services, and little progress has been made since (Milner & Ford, 2007). As stated in Chapter One, the U.S. Department of Education Office for Civil Rights’ (2016) most recent data identified a significant gap in the number of African American and Latino students enrolled in programs for gifted students as compared to their overall school enrollment. Hence, the underrepresentation of RCLED students in programs and classes designed for the nation’s top students continues to be a persistent challenge for our educational system.

One of the contributors to the enduring disproportion of RCLED students in programs for gifted children has to do with teachers’ beliefs and perceptions about RCLED students and what giftedness looks like. Several researchers have found that teachers tend to hold a deficit view of minority students as compared to White students, and that teachers frequently have lower expectations for minority students as a result of
their perceptions of these students (Dingle Swanson & Nagy, 2014; Ford & Grantham, 2003; Olszewski-Kubilius & Clarenbach, 2011). As a result, in order to consider any strategies that might disrupt the lasting trends of underrepresentation of RCLED students in challenging academic programs and classes, it is necessary to also look at teachers’ beliefs and perceptions about high-ability and high-potential RCLED students. (Note: For the purposes of this study, I am using the definition of giftedness used in the report, National Excellence: A Case for Developing America’s Talent (Ross, 1993) which includes high potential as well as the traditional conception of giftedness as high academic performance.)

Tomlinson, Callahan, and Lelli (2004) conducted a series of eight case studies on identified high-potential RCLED students in Project START, a university/school district collaboration. The partnership used Gardner’s theory of multiple intelligences to identify high-potential RCLED students, provided a series of interventions for these students, and provided staff development for classroom teachers who volunteered to participate in the program. Teachers were asked to nominate “successful” and “unsuccessful” Project START students, who were then the subjects of the researchers’ case studies. The researchers sought to identify the factors that promoted success for these high-potential RCLED students, as well as factors that discouraged success for these students. Each researcher became responsible for conducting a case study on two of the students, but were not aware of whether their students were nominated as successful or unsuccessful. They conducted several full-day observations of the students in class, as well as interviews with the students, teachers, parents, mentors, and administrators. During the
observations, the researchers took field notes on project elements such as multiple intelligences and multiculturalism in the classroom and notes on the student being observed to create a general profile of that student as a learner (Tomlinson et al., 2004). After each site visit, the researchers went over their observation and interview data together using a constant comparative method of data analysis to identify patterns and, eventually, emergent themes. The researchers found that teachers were more likely to view a child as successful if he or she “demonstrated outstanding ability in ‘traditional’ areas (e.g., writing, reading, spelling, math) and/or was a ‘low-maintenance’ student (e.g., was compliant and had few or no behavior problems” (p. 27). The opposite was true for students who showed talent in “non-traditional areas” or who were viewed by teachers as “high-maintenance;” that is, these students were more likely to be viewed by teachers as unsuccessful (p. 27). Moreover, “teachers were unable to rapidly change their conceptions of intelligence” (p. 27). This study highlighted the tendency for teachers to overlook non-traditional indicators of giftedness in favor of more traditional markers. This point is important since minority students tend to exhibit non-traditional indicators of giftedness more frequently than do White students (Baldwin, 1987; Bernal, 2002; Ford & Grantham, 2003; Neumeister et al., 2007).

Similarly, Neumeister et al. (2007) surveyed 27 teachers involved in Project CLUE, a university/school partnership aimed at increasing minority students’ participation in gifted programs. Through these surveys, researchers sought to uncover teachers’ beliefs about giftedness specifically with regard to minority and economically disadvantaged students. The teachers, all of whom were a part of Project CLUE and
taught gifted clusters which included RCLED students, were asked to complete a survey about their beliefs and perceptions about the characteristics and needs of gifted students. Ninety-six per cent of the surveyed teachers were female and 93% were White, statistics which are similar to the overall teacher demographics in education (Taylor et al., 2016). In addition, most of the teachers surveyed had participated in significant professional development in gifted education. After reading survey responses numerous times, the researchers developed inductive codes for responses and counted how many times a survey response fit each code category. The categories described the various ways in which respondents described their perceptions of giftedness in students. The categories included teacher perceptions of giftedness such as the student being self-motivated, a quick learner, curious, creative, having a strong vocabulary, and loving to read. The survey responses indicated that teachers more frequently identified traditional indicators of giftedness, such as those previously mentioned, than non-traditional identifiers, such as the student being bored or seeking challenge (Neumeister et al., 2007). Despite the teachers’ previous professional development, which included education on identifying giftedness in students from underrepresented groups, the study found that most teachers surveyed did not have a strong understanding of how giftedness may be expressed differently in students from diverse backgrounds. Furthermore, teachers in the study were more likely to focus on RCLED students’ deficits rather than their strengths and this caused teachers to believe that RCLED students might not actually be gifted (Neumeister et al., 2007). Since traditional characteristics of giftedness may be less frequently evident in the behavior of gifted RCLED students (Bernal, 2002), the study underscored a
possible contributing factor to the problem of underrepresentation of RCLED students in programs for the gifted.

In a broader study, Moon and Brighton (2008) surveyed 434 teachers from a cross-section of the United States to determine teachers’ perceptions of giftedness in young children. The study consisted of two parts: the first was a survey using a Likert-type scale that asked respondents to rate their conceptions of giftedness, including signs of giftedness and beliefs about giftedness across groups. The second part of the survey asked respondents to discuss case studies that deliberately represented gifted students from different backgrounds. One case study portrayed student giftedness in a traditional paradigm, while the remaining cases presented giftedness “masked” by some other factor, such as language background or poverty. Teachers from urban, rural, and suburban settings participated, and represented schools with varying poverty rates. Again, similar to national statistics for teachers (Taylor et al., 2016), 98% of the respondents were female and 91% were White. The researchers used descriptive statistics to analyze the quantitative data from the first part of the study. The responses from the second, open-ended, part of the study were analyzed inductively using cognitive maps (Moon & Brighton, 2008). The researchers hand-coded responses, noting novel themes. Common and frequent themes were noted and then analyzed based on frequency within respondent groups (e.g. urban, rural, grade-level). The researchers then used this analysis to create a cognitive map showing the most prominent themes. The researchers found that “the vast majority of primary-grade teachers hold traditional conceptions of the constructs related to gifted and talented learners” (p. 472). The student in the case study who represented
the majority culture and traditional paradigm of giftedness was more likely to be recommended for gifted identification by survey respondents. On the other hand, when discussing the other three non-majority culture students, teachers were more likely to focus on these students’ deficits (e.g. lack of English language proficiency) and to suggest resources aimed at these students’ deficits rather than recommending them for gifted programs. Teachers also identified traditional views of the behaviors of gifted students, such as good work habits, robust vocabulary, and ability to read. These findings suggest that teachers are less likely to identify as gifted students for whom English is a second language or who come from lower socio-economic groups where books may not be as prevalent in the home. In fact, the researchers reported that “greater than one third of the participants indicated that potential for academic giftedness is not present in all socio-economic groups in our society, a belief that seriously disadvantages young students in poverty from being considered for gifted programs and services” (p. 473).

Finally, the study found that teachers tended to believe that students with some observable deficit ought not to be included in programs for the gifted until the deficit is overcome (Moon & Brighton, 2008). These findings support the notion that teachers’ perceptions about the academic abilities and potential of RCLED students are an important factor in both understanding why RLCED students continue to be underrepresented in gifted program, and also in seeking ways to increase equity in such programs for RCLED students.

Harris et al. (2009) studied one particular sub-group of RCLED students, English learners (ELs). In their study, the researchers interviewed 31 participants including
students, parents, and school personnel with regard to identification procedures for gifted ELs. The researchers also analyzed district and state procedures for identifying students for gifted services. Using a constant-comparative approach to coding interview data, the researchers identified a variety of factors which serve as barriers to the identification of ELs for gifted services. Several factors of import emerged from the data: 1.) the high mobility rate of families of EL students (resulting in difficulty in keeping accurate records on EL students); 2.) lack of staff comfort with and familiarity with various assessment procedures, particularly alternative assessments that do not rely on traditional measures; 3.) lack of staff knowledge of students’ cultures and how culture may influence learning and behavior; and, 4.) lack of parental involvement (Harris et al., 2009). The researchers proposed several interventions that could increase staff knowledge and institute better practices for identifying gifted EL students. Of particular importance to this study was the researchers’ finding that teachers in the school district reported that they feel they lack awareness of EL students’ cultures and how they influence students’ learning and behavior in school. The researchers suggested that professional learning opportunities be presented for teachers to better understand their students’ cultures and that the district should adopt a multicultural curriculum. Another important finding was that parental involvement in the school was low for EL students. The researchers suggested that the district implement various supports, such as bilingual personnel to relay information about school-related matters to families. This information could include educating parents on the opportunities within the school district for high-potential and high-achieving EL students. This study is one of a handful that focuses on high-potential
language minority students, a subset of RCLED students that is frequently overlooked in the dialogue pertaining to underrepresented groups in gifted education.

DeWet and Gubbins (2011) studied teachers’ beliefs about culturally, linguistically, and economically diverse (CLED) gifted students. Specifically, the researchers examined teachers’ beliefs about the ability of CLED gifted students and their participation in programs for gifted students. The researchers surveyed 308 teachers across eight states, four states with mandates for gifted education and four states without mandates. Teachers responded to the *Teachers’ Beliefs About Culturally, Linguistically, and Economically Diverse Gifted Students Survey* (de Wet, 2006). The survey included 21 questions that gathered demographic background information about the respondents and 30 questions about their beliefs about gifted CLED students using a 5-point Likert-style survey (deWet & Gubbins, 2011). A factor analysis of the survey resulted in three final factors that reflected respondents’ beliefs about CLED gifted students. The first factor indicated teachers’ beliefs about the benefits of including CLED students in programs for gifted students. The second factor indicated teachers’ beliefs about CLED students’ abilities to be successful in programs for the gifted. The third factor indicated teachers’ beliefs about how CLED students are assessed for inclusion in programs for gifted students. All three factors were analyzed for reliability and each had a Cronbach’s alpha of .7 or higher (Factor 1, $\alpha = .876$; Factor 2, $\alpha = .743$; Factor 3, $\alpha = .717$) indicating acceptable reliability (deWet & Gubbins, 2011). Overall, teachers in this study believed that including CLED students in gifted programs was beneficial for all students, including those already in the gifted program. The survey analysis also indicated that
teachers responded that CLED students have the ability to succeed in programs for gifted students. For example, 80% of teachers surveyed agreed with the statement “CLED students possess the same range of abilities as other students” (deWet & Gubbins, 2011). Teachers who participated in the study tended to believe that CLED students express giftedness differently than do White, native English speaking students (de Wet & Gubbins, 2011), although just over half of respondents agreed with this precept and many (31%) indicated that they were neutral (deWet & Gubbins, 2011). On the statement, “Because of gaps in prior learning, gifted CLED students do not qualify for gifted services,” about the same percentage of teachers agreed (39%) as disagreed (37%). These results indicated that, overall, teachers believed that CLED students could and should be included in programs for gifted students, and that they could succeed in these programs. There was somewhat less agreement when it came to practices used to assess gifted CLED students for inclusion in gifted programs, but the teachers also indicated that such procedures may need to change in order to accurately assess gifted CLED students’ abilities accurately (de Wet & Gubbins, 2011).

Based on the survey analysis, the researchers questioned why disparities persist in CLED student representation in programs for gifted students. The authors suggested that, as noted in other studies (Plucker et al., 2010, for example), the focus on standards-based education perhaps has a negative impact on CLED students’ opportunities to be included in programs for the gifted because schools are hyper-focused on numerical data as opposed to more inclusive, broader processes for inclusion in gifted programs. The de Wet and Gubbins (2011) study is pertinent to my study because both look to teachers’
beliefs as an important factor in the complex puzzle of how to include and serve diverse gifted and high potential students.

Kumar, Karabenick, and Burgoon (2015) examined how teachers’ implicit and explicit beliefs about diversity in their classrooms affected their instructional practices. They grounded their research in achievement goal theory (Kumar et al., 2015) which, in part, describes teachers’ instructional practices as they relate to performance and mastery goals. In a performance-focused environment, for example, teachers focus on student-student comparisons as a measure of academic success, while in a mastery-focused classroom the teacher’s practices focus on student learning and improvement (Kumar et al., 2015). The mastery-focused classroom would be more conducive to culturally responsive instruction because the teacher is more likely to feel responsible for her culturally diverse students’ learning and progress as individuals, and for creating a socially supportive classroom environment, and therefore the teacher is more likely to engage in practices that would meet these goals (Kumar et al., 2015). The researchers hypothesized that the implicit and explicit beliefs teachers hold about their culturally diverse students impact the type of instructional focus and, in turn, the instructional practices the teacher then implements in her classroom. The researchers studied 241 White, mostly female teachers (again, reminiscent of U.S. national teacher demographics). Teachers completed the Implicit Associations Test (developed by Greenwald, Nosek, and Banaji, 2003) to measure their implicit attitudes toward various stimulus groups (including Arab, African American and White adolescents). Teachers also completed a survey using a Likert-type scale that measured their explicit
stereotypical beliefs, their beliefs about promoting respect in their classrooms, responsibility for culturally responsive teaching, and responsibility for resolving interethnic classroom conflicts, as well as questions related to the teachers’ instructional practices. The researchers conducted a path analysis to test their hypothesis. They found that there were direct paths from teachers’ explicit stereotypical beliefs to their use of performance-focused instructional practices, responsibility for culturally responsive instruction, and responsibility to resolve interethnic conflicts (Kumar et al., 2015). Moreover, the researchers found that the relationship between the teachers’ implicit beliefs about diverse students and mastery-focused instructional practices were mediated by their feeling of responsibility to provide culturally responsive instruction and resolve interethnic conflicts (Kumar et al., 2015). Although their original hypothesis was not support by the data, the researchers found that teachers whose implicit beliefs about the non-White subgroups were less favorable felt less responsible for promoting mutually respectful relationships among students and less responsible for employing culturally responsive teaching practices. Teachers who held explicitly negative beliefs about non-White and economically disadvantaged students were more likely to use performance-based teaching practices, which are less likely to promote high level analytical thinking in students (Kumar et al., 2015).

Certainly, then, it can be hypothesized that teachers’ beliefs about RCLED students may affect how teachers interact with and support these students in advanced level courses. These studies point to the idea that the teacher’s beliefs, both implicit and explicit, about the student affect the way in which the teacher interacts with the student;
these teacher characteristics, then, can be looked to as having possible influence on student outcomes on AP courses. Culture cannot be discounted or undervalued as an important piece in how RCLED students experience the teacher and the classroom. All learning takes place in a social and cultural context (Powell & Rightmyer, 2011). Hence, while my study does not look at culture, per se, the importance and significance of the students’ cultures(s) and the teacher’s response to students’ culture(s) are the fundamental concepts underlying the theoretical framework used for this study.

Overall, RCLED students are frequently overlooked for advanced level courses and gifted education programs because there may be a disconnect between the teacher’s beliefs about giftedness and how it manifests itself in students, and in their beliefs about RCLED students’ areas of strengths and weaknesses. Non-traditional indicators of high potential, such as leadership skills and creativity, are more common in minority students but less frequently identified by teachers (Baldwin, 1987; Neumeister et al., 2007). Since teachers have a significant role in the identification of students for gifted programs and advanced level courses, this narrow view of giftedness may contribute to the trend toward underrepresentation of RCLED students in such areas.

Moreover, “A central reason that some students of color are not represented in gifted programs is due to cultural differences and misunderstandings that often exist between students and teachers” (Milner & Ford, 2007, p. 167). Teachers are far more likely to identify deficits in RCLED students over these students’ strengths (de Wet, 2006; Harris et al., 2009; Neumeister et al., 2007). This is true even in cases where the inclusion criteria for the gifted program are standardized test scores such that all students
in the program have been included based on the exact same criteria (Neumeister et al., 2007). The implication of the narrow and persistent view of giftedness and cultural misunderstanding is that teachers are less likely to identify RCLED students as gifted and less likely to perceive their academic strengths. Hence, these students are consistently underserved and under-challenged. These findings relate to my study in that I examined how AP teachers view RCLED students in advanced level courses as well as how successful AP teachers of RCLED students use culturally responsive pedagogy. These are both factors which, based on the research findings cited previously, may contribute to the narrowing of the Excellence Gap.

As a whole, the preceding studies have implications for student inclusion or selection for Advanced Placement courses, as well. If teachers maintain such traditional and narrow beliefs about who should and should not be included in programs for high-potential students, it reasons that diverse students are being excluded from AP courses as well. The College Board (2014) reported that only three out of ten African American students with the potential to succeed in Advanced Placement courses were actually enrolled in those courses; only four of ten high-potential Hispanic students were enrolled in AP. Olszewski-Kubilius and Clarenbach (2011) reported that minority students enrolled in AP classes were not passing the end-of-course AP exams at the same rate as were majority students. Hence, teacher perceptions of RCLED students’ potential for academic rigor may contribute to gaps in opportunity and achievement in AP courses, as well. Before turning the focus to the AP teacher, specifically, however, other salient characteristics of the AP classroom merit discussion.
Advanced Placement: A Microcosm of Inequity

Despite the fact that overall participation of all groups in Advanced Placement (AP) courses has increased dramatically over the past ten years, the most recent College Board (2014) data show that RCLED students are also still underrepresented in AP courses. Hence, as noted earlier, RCLED students face similar challenges in gaining access to AP courses as research has shown they face in gaining access to programs for the gifted. In both cases, access is typically gained through teacher recommendation, yet research findings have shown that teachers frequently have a deficit view of RCLED students, even when intelligence scores suggest these students are capable of advanced-level academic work (Ford & Grantham, 2003). Although Advanced Placement courses have been increasingly available to all students, the perception of what it takes to be an AP student requires consideration of perceptions of giftedness, as well, as these two notions remain ideologically linked. However, the teacher is only one piece of the puzzle when considering the need for equity in gifted programs and advanced level classes such as AP. Several factors that limit RCLED students’ access to AP coursework and their success in these courses must be considered in order to have a robust picture of the nature of this ongoing problem.

AP opportunity. One important measure of equality in excellence is the opportunities racially and ethnically diverse populations of students have to take rigorous courses. Darling-Hammond (2007) suggested that “unequal access to key educational resources, including skilled teachers and quality curriculum,” are directly related to unequal outcomes for certain groups of students (p. 320). The percentage of students in
various racial and ethnic subgroups enrolled in AP courses, then, is one way to look at excellence gaps.

Researchers and scholars have well-documented the under-representation of minority students in programs and courses for academically advanced students in U.S. schools (Kyberg et al., 2007; Moore & Slate, 2008; Theokas & Saaris, 2013; Whiting & Ford, 2009). In many cases, students in underrepresented groups are denied access and opportunity to engage in academically rigorous work. The College Board (2014) reported that 60% of students who have AP potential are not participating in AP courses, a net of nearly 300,000 students nationwide.

Theokas and Saaris (2013) stated that Advanced Placement and International Baccalaureate courses are a promising and potent approach to eliminating excellence gaps. The authors examined data on Advanced Placement exam-takers from the College Board and the U.S. Department of Education’s National Center for Education Statistics. They found that the vast majority (91%) of public high school students in the U.S. attend schools where Advanced Placement classes are offered. However, the authors estimated the total number of “missing” AP students, that is, students who have the ability and could take AP course but do not, to be more than 600,000. The largest gaps between those students who could take AP but do not were evident for low-income, Black, American Indian, and Hispanic students (Theokas & Saaris, 2013). The authors also discussed a topic of particular relevance to this study. They asked if the AP enrollment gap is merely representing a preparation gap. In other words, the authors echoed commonly heard pretexts for why students of color are underrepresented in AP courses:
these students are simply unprepared for the rigor of AP and to include them risks watering down the college level curriculum (Theokas & Saaris, 2013). However, the authors noted that in the College Board’s analysis of nearly 700,000 high school graduates in 2012, 72% of Black students, 75% of American Indian students, and 66% of Hispanic students whose PSAT scores indicated readiness for AP in math were left out; statistics for science were nearly identical (Theokas & Saaris, 2013). They also cited several school districts taking unique approaches to including more of these missing students in AP, including those students who feel that AP classes are not welcoming places for students of color (Theokas & Saaris, 2013). The authors also recommended that schools and policymakers offer supports for historically underrepresented students who decide to take AP as a means of increasing opportunity and achieving equity in AP (Theokas & Saaris, 2013). Based on their analysis of AP statistics, the authors’ recommendations indicated that schools must take a proactive role in seeking new ways to improve access to rigorous courses for RCLED students who show potential for success.

However, schools and districts frequently create structures that do just the opposite. That is, barriers often exist that limit access to rigorous courses for underrepresented populations of students (Ford, 2011; Moore & Slate, 2008). These barriers may include pre-requisite requirements for higher level courses or a teacher recommendation requirement. These requirements often serve as gate-keepers and amount to the exclusion of many racial/ethnic minority students from the most challenging courses (Smith et al., 2011). Opportunity gaps such as this are a direct cause
of excellence gaps, as well, and must be acknowledged and rectified if we are to achieve equality in excellence. In other words, the problem of the Excellence Gap lies not only in the gap in achievement of students who are included in high-level courses, but also in the fact that so many high-potential RCLED minority students are excluded from such courses to begin with.

**Access to information.** Another barrier to the inclusion of under-represented groups in high-level courses is that such students and their parents frequently lack the cultural capital enjoyed by majority students and parents (Ford, 2011; Hallett & Venegas, 2011; Hardesty et al., 2014; Kyburg et al., 2007; Plucker & Peters, 2016). Students and families from non-majority groups often lack the knowledge of how to access information and maneuver within the system along the path to higher-level courses, and, ultimately, to college. In order to address this concern, systems must create programs to actively involve and educate parents and families to help under-represented students access and achieve at high levels (Smith et al., 2011; Whiting & Ford, 2009). Hallett and Venegas (2011) called for an explicit examination of how schools meet the needs of the students they serve, especially in the case of schools serving minority and low-income students. They noted that such students are commonly excluded from the kinds of knowledge that lead to college readiness and success (Hallett & Venegas, 2011). Indeed, knowledge of AP courses is exemplary of this type of cultural capital not shared by all groups of students and their families, and therefore should be considered when examining how to increase AP opportunity and decrease excellence gaps in U.S. schools.
Montoya, Matias, Nishi, and Sarcedo (2016) analyzed the disproportionate representation of minority students in the Denver Public Schools’ programs for gifted and talented (GT) students. They analyzed GT program and public school enrollment statistics through the theoretical framework of Bourdieu’s (1977) thoughts on cultural capital and W.E.B. Du Bois’ (1903) example of the veil (Montoya et al., 2016). They found that several minority groups were represented disproportionately in programs for gifted students. For example, while Latino/Hispanic students made up 44% of the school population, they were only 9% of the population of identified gifted students (Montoya et al., 2016). White students were two to three times more likely to be identified for gifted and talented programs as were Latino/Hispanic or Black students (Montoya et al., 2016). The authors also offered narratives as testimony of lived experiences of racial discrimination in accessing gifted and talented programs in the Denver Public Schools. Their analysis suggested that the families with greater cultural capital with relation to accessing gifted programs were more likely to have their children included in such programs; by and large, these families were White (Montoya et al., 2016). The concept of cultural capital is a notable feature affecting inclusion in programs for high-potential, high-ability students, including Advanced Placement.

**AP success.** While the opportunity gap for RCLED students in AP classes is significant, there is also a persistent AP Excellence Gap as measured by success on the AP exam (College Board, 2014). “Success” on the AP end-of-course exam is defined as scoring a three or better (out of a possible five). In their most recent report on AP statistics, the *10th Annual AP Report to the Nation* (2014), the College Board reported
that while several states made progress in 2013 on closing the AP Excellence Gap for African American, Hispanic, and Native American students, others have seen the gap stagnate or even widen from the previous year’s data. The gap was most prevalent for African American students, with only one state successfully eliminating the AP Excellence Gap for African American students, while 14 states either achieved no progress or experienced a decline in success for Black students (College Board, 2014). The picture was somewhat brighter for Hispanic students, however. The College Board reported that, in the U.S. as a whole, the opportunity gap was eliminated for Hispanic students in 2013, and 14 states successfully eliminated the Excellence Gap for this group, as well (2014). However, 19 states showed either no progress or a decline in the AP success rate for Hispanic students as compared to the previous year. In some cases, even in states where the gap was eliminated, there was an overall decline in success of Hispanic students on the AP exam (College Board, 2014). This trend is troubling since, if it continues, states that have eliminated the AP Excellence Gap for Hispanic students may find themselves losing ground and facing a recurrence of this gap.

High school success in rigorous, challenging, high-level curricula, such as is offered in Advanced Placement courses, is an important indicator of college readiness (Adelman, 2006; Dounay, 2006; Finn & Wright, 2015; Hallett & Venegas, 2011). Clearly, the issue of opportunity is a major challenge, but it is also important to examine how students, particularly those from historically underrepresented groups, achieve when they are given the opportunity. As seen in the data above, AP Excellence Gaps remain persistent and warrant as much attention as AP opportunity gaps. Hence, in my research I
studied teachers whose AP RCLED students have found success as a means of understanding how schools and policy-makers might work to eliminate AP Excellence Gaps.

Plucker and Peters (2016) discussed the current state of excellence gaps in U.S. public schools and presented an overview of several programs aimed at reducing these gaps. Included in their discussion were programs specifically for culturally diverse populations of students. They pointed out that such programs are worthwhile because of the widespread underrepresentation of diverse students in programs for gifted students and because of the rapid growth of these diverse populations of students in the nation’s public schools (and as discussed in Chapter One of this dissertation) (Plucker & Peters, 2016). Among the programs and strategies they highlighted was the practice of “front-loading” (Plucker & Peters, 2016, p. 130). This practice involves exposing students who would typically be excluded from rigorous courses to high-level curriculum before they are expected to take such courses. The authors highlighted the College Board’s SpringBoard program, which College Board research has found to be successful in helping to increase access to and success in AP courses for diverse students (College Board, 2011; Plucker & Peters, 2016). This program involves front-loading AP curriculum and learning strategies in math and English language arts for diverse students in the middle grades as preparation for AP course-taking in high school (College Board, 2011). Interestingly, the College Board’s website highlights the SpringBoard program’s focus on teacher preparation as a mechanism for student success. The website states, “The [SpringBoard] program is built on this core belief: When teachers are supplied with
the best materials, methods, and professional support, student success follows” (“Why SpringBoard?”). Also of pertinence to my study is the fact that this successful program includes “Learning Walks” as a part of SpringBoard teacher professional development (“Professional Learning”). This element of the program involves teacher observations by SpringBoard experts, including recommendations for improvement of program implementation and teacher progress. This program has shown some success for closing excellence gaps in AP classes, but it is worth noting that the program is one that school systems must purchase from the College Board, and that it is currently only being used in a handful of states (College Board, 2011; Plucker & Peters, 2016).

Dingle Swanson and Nagy (2014) conducted a similar case study of a special AP program designed to offer AP opportunity to African American students who had previously limited opportunities to such challenging courses within the school. The researchers sought to identify what supports existed that led to minority students’ success in the AP program. The study participants were four AP teachers in the program, two administrators of the program, and six students were enrolled in the program. The researchers conducted a document review of materials related to the AP program, its setup, teacher development, program guidelines, and student grades. They also interviewed the participants and conducted a classroom observation of each of the four teachers. The administrator and teacher interviews were individual while the students participated in two focus groups of two to three students each. The researchers coded the data using a chart to match the data to the research questions. Once this was complete, the researchers used a constant-comparative approach to identify patterns within the data.
This process then led to emergent themes. These themes included academic support, guidance, and social and emotional support. After several repetitions of data analysis, the researchers organized their data into three areas: School-level supports, Classroom- and Instructional-level supports, and Individual supports (Dingle Swanson & Nagy, 2014).

At the school level, the researchers found that the AP program coordinator was an important academic and guidance support for the students in the program. The AP coordinator served as bridge of communication between the students’ homes and the teachers. Several of the adult participants described their approach to supporting the students as a “joint effort” (Dingle Swanson & Nagy, 2014, p. 244). At the classroom-level, the researchers found the teachers’ use of culturally relevant practice to be an important support for student success. The researchers specifically pointed to the “feeling tone” (Dingle Swanson & Nagy, 2014, p. 246) in the classrooms that they observed. They noted that the classroom relationships they observed, between teachers and students and among students, showed “respect, caring, and support” (p. 246). They also noted teachers’ use of culturally responsive instructional practices, such as flexible grouping, use of formative assessments, and scaffolding. Finally, at the individual level, the students identified people (parents, teachers, administrators, and the AP coordinator) as being important supports. They also highlighted personal characteristics such as drive, determination, and inspiration as being motivating factors for success.

Overall, based on their single case study, Dingle Swanson and Nagy (2014) offered several lessons for consideration for other programs seeking to support minority students’ success in the AP environment. Among these lessons was the importance of
having a specific person to oversee the program and maintain strong communication. They also stressed the supportive role of a caring community. They pointed out that access to AP for historically underserved students is simply a “gateway” (p. 252), and that strong supports are necessary if students are to succeed in these classes. This study directly relates to my research as I sought to identify factors for RCLED AP student success, as well.

In a similar study, Davis, Davis and Mobley (2013) examined the collaborative efforts of a school counselor, school counselor intern, and an AP teacher to recruit and support high potential African American students in AP psychology. The collaborators provided the students with emotional and academic supports in order to help them succeed. The researchers were interested in finding out if African American students’ preparation and success in the AP psychology class would increase as a result of their participation in the program. Prior to the initiation of the program, 12% of the school’s Advanced Placement population was African American; the overall African American population of the school was 26%. Traditionally, in order to participate in an AP course at the school, students initiated an application process in which teachers completed recommendations for the interested students. Using these recommendations, along with students’ previous test scores and grades, students were accepted into the AP class by the AP teacher. The program collaborators realized that these procedures likely left out a number of African American students who had the potential to succeed in AP classes but who either had not initiated the application process or who had not been recommended by their previous teachers for AP. To identify students for the counselor-driven program, the
team examined a variety of factors for African American students who were rising
juniors or seniors. They included in their list of potential AP program participants any
African American students who had a GPA of 3.0 or higher, any who had been identified
or referred for identification for gifted education in the school system, or any who had
scored at the 85th percentile or higher on a previous standardized exam (Davis et al.,
2013). The group also asked teachers to recommend their top three high-potential African
American students without consideration of their current grades. This process resulted in
a list of 35 potential participants in the new AP program.

Once the possible participants were identified, the counselor and AP teacher met
with each student at least two times to describe the program and recognize the student’s
high-potential. The counselors and teacher also made overt attempts to meet with the
potential students informally in order to develop relationships with them. The team
contacted parents and caregivers of potential participants and held a family dinner to
explain the program and allow potential participants to meet African American current
AP students and other potential program participants. Of the 35 students who were
eligible to participate, 13 chose to fully participate in the program, while 10 chose to take
the AP classes but did not choose to participate in the support aspects of the program.
This group of 10 students ended up as the control group for the study (Davis et al., 2013).

Once they were in the program, the 13 students received several interventions
designed to support their success in the AP psychology class. First, the students
participated in a culturally responsive 2-week seminar over the summer (Davis et al.,
2013). The seminar was held at a historically black college/university, and focused on
building a sense of community among the participants and developing within the students a view of themselves as scholars and gap-closers. When school started, the 13 participants formed a cohort in one of the AP teacher-leader’s classes, in which the counselors conducted weekly support sessions. The main focus of these support sessions was to provide emotional support and maintain the community atmosphere begun during the summer and cultivated within the class. The three adult participants kept field notes throughout the project and met regularly to discuss the progress of the students and the program (Davis et al., 2013).

The researchers reported both quantitative data in the form of end-of-course AP exam performance, and qualitative data in the form of journal entries made by the three adult participants related to themes such as sense of family, peer support, and academic identity, among others (Davis et al., 2013). The quantitative data revealed that students who participated in the cohort performed better on the end-of-course AP exam than did the African American AP students who did not participate in the counseling program, although the researchers acknowledged that the difference was not statistically significant at the $\alpha = .05$ level. There was no statistical difference between the performance of the program participants and the White students on the end-of-course exam, but there was a significant difference ($p \leq .001$) in the performance of the African American AP students who did not participate in the program and their Caucasian peers, who out-performed the non-program African American students on the AP exam (Davis et al., 2013). The qualitative, thematically-coded data indicated that the students in the program developed a strong sense of community and close relationships with the adult participants. The
students also developed a scholarly self-concept which was evident both within and outside of the classroom (Davis et al., 2013).

The researchers again acknowledged that the small sample size limited the breadth with which the findings of the study could be applied to other settings. However, several of the findings in this study relate directly to my study. First, the researchers highlighted the need for and the success of targeted interventions for the African American AP students. Of special import was the sense of community and strong relationships between students and adults and within the cohort group that were purposefully developed within the program. While it cannot be said that these social-emotional factors led directly to the students’ strong performance on the end-of-course exam, the researchers stated that the supports certainly had positive outcomes for the students in the program (Davis et al., 2013). In addition, the teacher and counselors’ care and concern for the success of underserved AP students seen in this study reflect a particular mindset for culturally responsive education. Finally, the AP program at the heart of the study was based on the tenets of culturally responsive pedagogy, which also lie at the foundation of my study of teachers of successful AP RCLED students.

**Summary.** Previous research and statistics show that RCLED students have fewer opportunities to take AP classes and that they are less successful than their White peers when they are included in AP (College Board, 2014; Theokas & Saaris, 2013). There are a variety of barriers to access and success for AP RCLED students (Ford, 2011; Hallett & Venegas, 2011; Montoya et al., 2016) but research has also suggested that schools can establish purposeful and creative supports that help RCLED students to be
more successful in AP classes (Davis et al., 2013; Dingle Swanson & Nagy, 2014; Theokas & Saaris, 2013). This literature supports my study in that I similarly sought to identify ways that school can help AP RCLED students succeed by examining the beliefs and practices of AP teachers who play a critical role in their students’ experiences in the AP environment.

**AP Teachers: The Cornerstone of the AP Classroom**

The role of education leaders is important in instigating practices that will address issues such as increasing access to AP classes for RCLED students and increasing access to information about such rigorous courses for RCLED students and their families. However, no other role in education is more important than that of the teacher (Ferguson, 2007; Ford, 2011; Whiting & Ford, 2009). As Hattie (2009) argued, teachers need to understand deeply what their students know (and do not know) and be able to create learning experiences and offer feedback that move each individual student along on the continuum of knowledge for that subject area. There is an important connection between the teacher’s cognition about students, teaching, and learning and her actions taken as a result of that cognition. As such, teachers must be better prepared to engender the beliefs, expectations, and strategies that lead to challenge and rigor for all students, particularly students from backgrounds that differ from their own (Ford, 2011; Ford & Grantham, 2003; Kyberg et al. 2007; Smith et al., 2011). Policy pundits note that in order to make the nation’s students internationally competitive in education we must cultivate teachers who are skilled in educating high-ability students (Finn & Wright, 2015). However, given the prevalence of the Excellence Gap and its implications for our increasingly diverse
society, it is not enough to have such teachers; we must also, specifically, cultivate teachers who are skilled in educating high-potential and high-ability RCLED students.

Some researchers have looked at salient characteristics of AP teachers, although few have focused on teachers with specific regard to AP RCLED students. For their 2002 report for the College Board, Milewski and Gillie surveyed over 32,000 AP teachers via mail and internet. Survey responses revealed that most AP teachers are mid- to late-career teachers who typically have earned master’s degrees in the fields they teach. However, the survey also revealed two important points relevant to my study: one, AP teachers who are also ethnic minorities are “heavily underrepresented” (Milewski & Gillie, 2002, p. 11). This finding is significant to this study as I examined teacher characteristics of teachers who are successful with AP RCLED students and the teachers’ ethnicity and ability to make cultural connections with RCLED students certainly may be significant factors. Second, the report found that AP teachers with the largest proportion of RCLED students were also those with less teaching experience (Milewski & Gillie, 2002). This finding suggests that perhaps more experienced teachers could be recruited to teach AP RCLED students or that more professional development ought to be offered for newer, less experienced teachers in order to improve RCLED student success in AP courses. Experience and professional development opportunities were two factors that I considered when examining teacher characteristics of AP teachers of successful AP RCLED students.

The AP teacher is also an important factor in the overall quality of the curriculum (Hallett & Venegas, 2011). In their study, Hallett and Venegas (2011) analyzed the AP
course-taking patterns of 48 college-bound students from the Los Angeles area. The majority (85%) of the participants in this study were minority students (Latino or African American). The researchers also conducted interviews with the students to gather data about the students’ perspectives on their AP course experiences. After their analysis of students’ transcripts and grades, both in the AP class and on the AP exam, the researchers found that while the students were motivated to take AP courses when the courses were available to them, their overall AP exam passing rate was low. “Students participated in end-of-course exams at a rate of 81% of the total courses attempted. Unfortunately…students passed 46% of the exams with a 3 or above…[while] students received a 4 or above on 16% of the attempted exams” (Hallett & Venegas, 2011, p. 476). This pass rate was significantly lower than the national pass rate reported by the College Board for that same year (60% scoring a 3 or higher; 33% scoring a 4 or higher).

In an attempt to add depth to the quantitative findings of their study on AP course taking patterns, Hallett and Venegas (2011) interviewed the student participants about their experiences in AP courses. The researchers used a software program to aid their constant comparative analysis of the interview data. They reviewed and refined the codes used for their analysis weekly, allowing for final themes to emerge from the qualitative data. Of particular significance to my study on AP teachers of RCLED students, Hallett and Venegas (2011) found that students believed that their teacher was an important factor related to their poor achievement on the AP exam. In total, the researchers stated that 44% of the students interviewed reported one or more negative experiences in their AP courses that had to do with the AP teacher. This finding supports the assertion that the
AP teacher is an important factor in RCLED students’ success in the AP class and thus worthy of deeper exploration.

**Student-teacher relationships and student success.** In discussing the role of the AP teacher in relation to AP student achievement, we ought to also examine the broader influence of student-teacher relationships on students’ academic performance. Research has consistently shown that student-teacher relationships play an important role in students’ achievement, motivation, and academic engagement (Martin & Dowson, 2009).

In his meta-analysis of 119 studies related to student-teacher relationships, Cornelius-White (2007) sought to identify the connection between student-teacher relationships and student outcomes. In his analysis, he looked at studies from 1948 through 2004, involving approximately 2,439 schools, 14,851 teachers, and 355,325 students mainly in grades 1-12. He identified a number of person-centered teacher variables, such as empathy, warmth, encouraging, and genuineness which corresponded to positive outcomes for students. For example, he noted that individual qualities such as caring, listening, honesty, understanding and respect were associated with positive school experiences (Cornelius-White, 2007). Overall, Cornelius-White (2007) found that such person-centered teacher variables are correlated with positive student outcomes, such as critical thinking, math achievement, drop-out prevention, and motivation. He concluded by advocating for the strong connection between positive student-teacher relationships and student academic success (Cornelius-White, 2007).

In their review, Martin and Dowson (2009) discussed the precept that the level to which the teacher and students are connected on personal and emotional levels influences
students’ academic motivation, engagement, and achievement. The authors examined a variety of theoretical perspectives with regard to student-teacher relationships, and developed a framework for connecting theory to practice. They noted that positive relationships between teachers and students led students to have more positive views of themselves, their academic potential, and attitudes toward school and schoolwork. The authors noted that positive relationships with teachers lead students to adopt positive beliefs about their academic abilities, and lead to positive behaviors such as “persistence, goal-striving, and self-regulation” (p. 329). In other words, if teachers AP classes have positive connections with their RCLED students, then this may be one factor which leads to success for these students in the class. This also leads to a discussion of culturally responsive pedagogy, the framework for the observation protocol used in this study and the basis of one of my research questions.

**Culturally Responsive Pedagogy**

Culturally responsive pedagogy (CRP; also referred to as culturally relevant pedagogy, culturally responsive instruction, or culturally responsive teaching) is an educational theory predicated on the fact that there is disproportionate academic achievement within racially, culturally, linguistically, and/or ethnically diverse (RCLED) student populations in U.S. schools; that is, students of color in the U.S. overall tend to have lower academic achievement than their White peers (Gay, 2010). Proponents of this approach assert that it is improper to attribute this achievement gap solely to non-school factors, such as socio-economic status, individual academic shortcomings, or even education institutional hegemony. CRP rests on the belief that educators must adopt a set
of culturally responsive principles and practices that allow marginalized, underachieving groups to perform better and achieve at higher academic levels. In examining the Excellence Gap and the on-going problem of underrepresentation of diverse students in programs for advanced and gifted students, “cultural and linguistic differences cannot be ignored or discounted” (Grantham, 2012, p. 217). In fact, Grantham (2012) argued, if programs for advanced and gifted students are to become truly equitable, then educators are obligated to also change their teaching to make it more culturally responsive.

Dilworth and Brown (2001) pointed out that teachers who are responsive to differences in their students’ cultures and backgrounds are more effective than those who ignore these factors or hold a deficit view of diverse students. Research has shown that students do better academically when their teacher is culturally responsive (McGrady & Reynolds, 2013). Many scholars and gifted education groups have also encouraged the adoption of culturally responsive pedagogy as a means of combating the problem of underrepresentation in programs for gifted and high-potential students (Ford & Grantham, 2003; Kumar et al., 2015; Milner & Ford, 2007; Minnesota Educators of the Gifted and Talented, 2005; Tomlinson, Ford, Reis, Briggs, & Strickland, 2004). Hence, the lens of CRP is a useful and appropriate tool through which to view AP teachers of successful RCLED students, as I have done in my study.

**Historical roots of CRP.** In order to understand the theoretical framework of culturally responsive pedagogy, it is necessary to first understand the historical educational backdrop that led researchers to propose the need for a different approach to teaching students of diverse ethnic and racial backgrounds. Historically, schools in the
United States adopted an assimilationist, “melting pot” approach to the role of culture in education (Phuntsog, 1999; Spindler, 1982). In the 1800s and early 1900s, this approach allowed recent immigrant groups to be assimilated into their new American culture and prepared them to be part of the emerging industrialized nation. Schools in the U.S. adopted a “culturally blind” approach to teaching and learning and believed that this approach was “fair” and desirable (Gay, 2010). It was widely accepted that a “color-blind” (Phuntsog, 1999, p. 101) approach was preferable because it treated everyone alike; equality of education was emphasized despite the growing reality that such “equality” produced inequity in education for students of color. Indeed, many teachers believed that good teaching was unrelated to the culture, ethnicity, gender, class or race of the teachers or the students in the classroom (Au, 2009; Gay, 2010). These beliefs failed to take into account, however, that the structure, expectations and curriculum of “good teaching” were based on the European American, middle-class, dominant culture value system (Au, 2009). In effect, a silent institutional racism developed in schools that favored and perpetuated the values and beliefs of the dominant culture at the expense and suppression of other cultures’ values and belief systems (Penland, 2010). As the sociocultural makeup of the country changed in the mid-to-late 1900s, educational theorists began to understand that this “one-size-fits-all,” Euro-centric approach to education was not working for students of diverse cultural, linguistic, ethnic, and racial backgrounds.

From this historical backdrop emerged the notion of culturally responsive pedagogy. A variety of researchers have added to the theoretical, practical, and
methodological base of this approach over time, especially within the past thirty years (Ladson-Billings, 1995; Ladson-Billings, 2009; Sleeter, 2012). Spindler (1982) noted that in his research in the 1950s, he discovered effects in the classroom of the complex interplay between the teacher’s culture and students’ cultures, particularly when the teacher is from the dominant culture of schooling and students are not. Beginning in the early 1970s, researchers began to identify the educational inequities in U.S. schools and assert the need for teaching and learning that acknowledges and draws upon students’ ethnic and cultural experiences (Gay, 2010). For example, in the early 1980s, researchers such as Au (1980) and Hollins (1982) discussed the importance of the concept of “cultural congruence” in student-teacher interactions and student success. In her study on native Hawaiian children’s achievement in reading lessons, Au (1980) discovered that the children performed better when the teacher structured the lesson similarly to their native speech patterns. Au (1980) suggested that “how we teach may be more important than what we teach” (p.8, emphasis in original), laying the foundation for the importance of attending to culture in the classroom. In discussing her famous Marva Collins study, Hollins (1982) pointed out that traditional content and instruction do not always resonate with students of color, and the success Marva Collins had with students was in large part due to her ability to make the content and instruction culturally relevant to her students (Hollins, 1982). Hollins (1982) stated then that “an examination of culture could offer valuable insights to more effective instruction for specific cultural groups” (p. 40). Through the 1980s and 1990s, researchers continued to explore the idea of cultural relevance in education and began to set out explicit frameworks for culturally responsive
education and teacher education to promote culturally responsive classrooms (Phuntsog, 1999; Shade, Kelly, & Oberg, 1997). Among the most significant studies during this time was Ladson-Billings’ (1995) ethnography on culturally responsive teachers of African American children, which is described in more detail subsequently.

As the dawn of the new millennium arrived, it became impossible to ignore the fact that there existed a significant inequity between the academic performance of White students and that of their African American, Latino, and Native American peers (Gay, 2010). This trend has been both consistent over time and significant in the gaps in achievement between groups. What’s more, the U.S. K-12 student population has become more and more diverse. According to the 2000 U.S. Census, “one of every three students…is of a racial or ethnic minority background. One in five children younger than 18 lives in poverty. More than one in seven children…speaks a language other than English at home” (Villegas & Lucas, 2002, p. 20). According to the latest statistics available from the National Center for Educational Statistics (NCES), in 2013-2014, 9.3 per cent of U.S. public school students are English Learners, up from 8.8 per cent in 2003-2004. The NCES also reported that, in 2014, 21 per cent of all children under the age of 18 were living in poverty, including over 10 million school-aged children.

Thus, while the population of students in U.S. schools has become ever more diverse, the historical, “factory-model” of education has produced larger and more troubling achievement gaps between White students and RCLED students. As noted earlier, this trend is mirrored in the underrepresentation of RCLED students at the highest levels of achievement, as well. Despite the major demographic changes in the nation’s
school-age children, the nation’s attitude toward education has changed little, as perhaps best evidenced by the adoption of the Common Core State Standards (CCSS) (National Governors Association Center for Best Practices, Council of Chief State School Officers, 2010). These standards set broad, national, grade-level benchmarks that do little in the way of offering challenge, differentiation or additional rigor for students who are already meeting minimum competency requirements (Plucker & Callahan, 2014).

Gay’s (2010) work over the past decade has presented a major contribution to culturally responsive pedagogy, and is presently considered one of the foremost theoretical frameworks in this field. However, all of the approaches to culturally responsive pedagogy rely on the premise that “academic achievement of students from culturally diverse backgrounds will improve if schools and teachers make an attempt to ensure that classroom instruction is conducted in a manner responsive to the students’ home culture” (Phuntsog, 1999, p. 98). Likewise, all reject the notion that the underachievement of diverse students is somehow the fault of their racial, cultural, or ethnic groups rather than the responsibility of the educational system. Rather, culturally responsive pedagogy acknowledges that, when infused wholly into education, cultural diversity is integrally beneficial to teaching and learning for all students.

For the purposes of this study, I relied mainly on the work of Ladson-Billings (1995; 2009), Gay (2010), and Powell and Rightmyer (2011) to outline the tenets of culturally responsive pedagogy. Ladson-Billings’ (2009) groundbreaking study of successful teachers of African American students inspired my study of successful teachers of AP RCLED students. Gay’s (2010) work is currently considered to be one of
the leading theoretical frameworks in the field of CRP. Powell & Rightmyer (2011) were two of the researchers who developed the *Culturally Responsive Instruction Observation Protocol* (CRIOP) (Powell, Cantrell, Correll & Malo-Juvera, 2014), the observation protocol I used for this study. Therefore, their work related to culturally responsive pedagogy is fundamental to my observations, and ultimately, to my findings. Though the work of Powell and Rightmyer (2011) is referenced here, I elaborate upon it in Chapters Three and Four, as well.

**Research on culturally responsive pedagogy.** There have been numerous research studies on the use of culturally responsive pedagogy (e.g. Brown, 2003; Bui & Fagan, 2013; Wiggan & Watson, 2016). For the purposes of this literature review, I have selected for discussion several studies with particular relevance to my study.

Hernandez Sheets (1995) examined the use of culturally relevant pedagogy in the context of an academic program aimed at accelerating the achievement of “at-risk” native Spanish-speaking Latino(a) students in Spanish language classes. Twenty-nine students were recruited for a model program aimed at using culturally relevant teaching practices to move participants from basic-level Spanish language classes to success in Advanced Placement Spanish literature and language (Hernandez Sheets, 1995). At the end of three years, “20 of the 29 Latina(o) students who participated in the program received college credit by passing AP [Spanish literature or Spanish language] exams” (Hernandez Sheets, 1995, p.189). Importantly, students involved in the program reported increased self-confidence, positive ethnic identity, and beliefs in their own academic abilities as possibly “gifted” (Hernandez Sheets, 1995). This study is relevant to my study as it
documents the success of culturally relevant pedagogy in helping high-potential RCELD students in an Advanced Placement setting. However, my study adds to the findings in the Hernandez Sheets (1995) study in two important ways: first, I looked at teachers of heterogeneously diverse AP classes, as opposed to the homogeneous classes examined in this study; and second, I examined CRP in the context of AP classes other than Spanish language classes, where the effects of teachers’ CRP might be confounded by students’ native-language abilities.

Penland (2010) conducted a phenomenological study of American Indian students who grew up during the 1950s and 1960s. She sought to understand their experiences of education during a time when American Indian students were typically educated in boarding schools or public schools which encouraged little participation from the community of families (Penland, 2010). The author purposefully selected eight American Indian participants who grew up during the 1950s and 1960s and were willing to share their experiences of education during that time. She conducted a total of three interviews with each participant. Penland’s (2010) study offers several findings that are of significance to this study. First, five of the eight participants discussed the importance of teachers in their own education. They identified teachers as the source of motivation, encouragement and empowerment (Penland, 2010). Second, seven of the eight participants discussed the need for culturally responsive pedagogy as a means of better serving American Indian students (Penland, 2010). The participants did not use the term CRP, but rather referenced in their narratives ideas closely related to CRP: the need for teachers to develop cultural awareness and to value the “other” culture; the need for more
culturally relevant curriculum; and that value of recruiting teachers from the students’ same cultures (Penland, 2010). These findings support the goals of this study, to understand how AP teachers may use culturally responsive pedagogy to foster success in their AP RCLED students.

Perhaps the most influential research study related to CRP and the present study is that of Ladson-Billings (2009). In her study, Ladson-Billings (2009) identified nine exemplary teachers of African American students and conducted in-depth interviews and teacher observations to understand what these teachers believed and did in their classrooms that caused them to be identified by various community stakeholders (including parents, principals, and teaching colleagues) as highly effective with African American students. Among her findings in this intensive, three-year qualitative study was that each teacher enacted the fundamental tenets of culturally responsive pedagogy in her classroom (Ladson-Billings, 2009). Among these ideals were beliefs about students’ abilities, the nature of knowledge itself as flexible, malleable, and questionable, and the importance of community and developing cultural competence. According to Ladson-Billings (2009), culturally responsive teachers hold the belief that teaching is more of an art rather than simply a technical task. They also believe that every student has the potential for success, as opposed to the belief that some students will inevitably fail. She also found that culturally responsive teachers foster a sense of community among students and seek to develop strong, personal, respectful, caring relationships with all students, relationships which often extend beyond the classroom to places such as the cafeteria, the hallways, and extra-curricular activities (Ladson-Billings, 2009).
students and teacher function more as “an extended family” (Ladson-Billings, 2009, p. 82) than simply a disconnected group of learners sharing space. Moreover, these teachers used “deliberate pedagogical strategies” to reach their students (Ladson-Billings, 2009, p. x). Culturally responsive teachers scaffold learning and create classroom experiences that allow the students to construct knowledge together, no matter from where the individual students are starting (Ladson-Billings, 2009). To find out what practices were most effective with African American students, Ladson-Billings (2009) “look[ed] carefully at the teaching” (p.14, emphasis added) of each exemplar teacher participant. This focus on the characteristics and pedagogy of exemplary culturally responsive teachers is foundational to my study of these same topics in the domain of Advanced Placement classes.

Hynds et al. (2011) conducted a study examining the effects of teacher professional development on New Zealand teachers’ culturally responsive pedagogies. For this part of a larger study, the researcher interviewed 150 teachers in New Zealand who participated in the Te Kotahitanga program. This program was established to introduce culturally responsive relation-oriented teaching practices to teachers of New Zealand’s indigenous Maori students. The need for such a program arose from the mismatch between the mainstream schooling (based in British colonialist history) and the Maori students’ culture. The program was grounded in the philosophies of Freire, and was focused on helping teachers learn to shift their relationships with Maori students to foster co-creation of knowledge in the classroom (as opposed to traditional teaching and learning methods based on a transmission model). Through the Te Kotahitanga program,
teachers engaged in a series of professional development activities with facilitators who were knowledgeable in the Maori culture and skilled in their own culturally responsive teaching practice, including workshops, observations, problem-solving meetings, and shadowing exercises. During the interviews, researchers asked the teachers about the effects this professional development program has had on their work with Maori students, including teaching strategies and development of caring relationships. After initial coding to determine significant themes, the interview transcripts were coded using NVivo to identify patterns and major themes in interview responses. Among the outcomes of this research was the teacher-participants emphasis on the significance of positive teacher-student relationships of student achievement. They noted a number of positive effects that stemmed from establishing such positive relationships with their students, including a better understanding of the students’ culture, a better understanding of the students’ needs in the classroom, and changes in the teachers’ assumptions about Maori students. The teachers discussed using a variety of culturally responsive teaching practices, including setting high expectations for all students, developing a classroom community of caring and support, and creating classrooms where all students (and the teacher) learned from each other (Hynds et al., 2011). Hence, the teachers in the study expressed that the professional development in culturally responsive relation-based teaching was effective in helping them to be more effective teachers for their indigenous Maori students (Hynds et al., 2011). This study relates to the present study in that the positive, caring relationships built between teachers and students is an important element of CRP as examined in this dissertation.
Griner and Stewart (2012) created, implemented and evaluated a culturally responsive teaching tool to determine if such a tool impacted teachers’ culturally responsive teaching practices and beliefs. In the first phase of their study, the authors adapted a checklist of best practices for culturally responsive teaching (CRT) from Fiedler et al. (2008). The authors then conducted an expert review and Delphi study of their revised checklist, resulting in the CRT tool used for the second phase of the study. In the second phase of their study, the authors conducted a mixed-methods case study to examine the impact of their checklist on study participants in the context of a professional development program. There were a total of 15 participants involved in this part of the study, including ten teachers, one administrator, and four instructional support employees. The researchers used participants’ scores on three quantitative surveys as well as their responses to written open-responses and interviews to understand the impact (if any) of the use of the CRT tool during a professional development program on the participants’ beliefs and/or practices. The researchers administered the surveys as a pretest and then again as a post-test after the professional development program was administered. The researchers used a dependent t test to determine if there was a significant difference in participants’ pretest survey scores and their post-test survey scores. The researchers coded the interview responses to identify themes related to the participants’ beliefs and practices as related to the professional development program. The open-ended written responses were coded as to whether the reported practices were new (after the professional development) or whether they predated the professional
development program to determine any impact on practice of the professional development.

The results of the mixed-methods study showed that the use of the CRT tool was effective in changing the participants’ practices toward a more culturally responsive model, but had little to no effect in changing participants’ beliefs (Griner & Stewart, 2012). Participants reported that, based on the checklist, they would use a variety of culturally responsive practices, such as using a culturally responsive curriculum or seeking to involve families and parents of RCLED students, more actively (Griner & Stewart, 2012). This study indicates that as teachers reflect on culturally responsive pedagogy, they become more aware of the need for and possible ways to implement such practices. In relation to my study, the CRT tool presented in the Griner and Stewart (2012) study informed my observations and interview protocol for AP teachers of RCELD students. However, rather than present questions about culturally responsive teaching in a checklist format, my study used open-ended interview questions based on the interview protocol used by Ladson-Billings (2009) to understand teachers’ beliefs and practices related to CRP in the AP context.

A recent mixed methods study by the authors of the *Culturally Responsive Instruction Observation Protocol (CRIOP), (3rd Edition)* (Powell, Cantrell, Correll & Malo-Juvera, 2014), the observation protocol I used in the present study, examined the outcomes of a classroom intervention program on teachers’ culturally responsive pedagogy (Powell et al., 2016). In this study, the researchers designed a professional development program aimed at increasing teacher participants’ use and effectiveness in
implementing culturally responsive practices in their elementary classrooms. Researchers collected student achievement data and conducted classroom observations using the CRIOP observation protocol. The researchers also conducted semi-structured interviews with the 27 teacher participants, all of whom were female, native English speakers and mainly White (there was one African American teacher participant) (Powell et al., 2016). The teachers participated in a pre-service summer workshop, school year professional development sessions, and in-school coaching, planning support, and on-site mentoring. In all the teachers received roughly 50 hours of professional development on CRP and the CRIOP elements (Powell et al., 2016). The goal of the professional development activities was to increase participants’ use of culturally responsive practices in their classrooms, including more culturally responsive classroom relationships, use of culturally responsive instructional and assessment practices, and use of culturally responsive discourse as outlined in the CRIOP protocol (Powell et al., 2016). Two field researchers observed the teacher participants using the CRIOP tool in both the fall and the spring, and conducted a series of semi-structured interviews with the teacher participants focused on both their classroom observations and their beliefs and perceptions about the use culturally responsive pedagogy. The four authors coded the interview data using both the CRIOP elements as codes and through inductive analysis (Powell et al., 2016). Data from spring interviews, observations, and student achievement scores on reading and math Measures of Academic Progress (MAP) assessments were compared to determine changes to teachers’ implementation of CRP after the professional development program, if their beliefs and perceptions changed as a result of
their involvement in the program, and to see if teachers’ implementation of CRP had any relationship to student learning as measured by students’ MAP scores. The researchers conducted a repeated measures ANOVA test using CRIOP observation scores from 23 of the 27 teachers who were observed in both the spring and the fall. The results of the test showed that teachers’ culturally responsive instruction increased significantly from the fall to the spring observations, Wilks’s $\Lambda = .67$, $F(1, 22) = 13.64$, $p < .001$ (Powell et al., 2016). Post-hoc analysis of the individual CRIOP pillar scores using repeated measures ANOVAs were also done to examine effect sizes of changes in each component of the CRIOP; results showed that statistically significant changes were measured in five of the seven areas of the CRIOP ($p < .05$) (Powell et al., 2016). Researchers also compared the fall and spring reading and math MAP scores for students in classes where teachers were either identified as High or Low Implementers of CRP (Powell et al., 2016). Using a one way ANCOVA test, the researchers determined that students in classrooms where the teacher was identified as a High Implementer scored significantly better on the spring MAP reading and math tests than did the students in classrooms with teachers identified as Low Implementers of CRP (Powell et al., 2016). Interview data of teachers’ perceptions of CRP supported the changes revealed in the observation data. That is, teachers expressed similar changes in their beliefs about CRP in their interview responses as was observed in their practice using the CRIOP tool (Powell et al., 2016). The results of this study showed that CRP can be taught and that interventions such as the one in this study show measureable effects, both in terms of teachers’ practice of CRP and student outcomes. The greatest changes in CRP for teachers in this study were in the area of
classroom relationships, assessment practices, instructional practices, and sociopolitical consciousness (Powell et al., 2016). This finding is particularly relevant to the present study in terms of which areas AP teachers of successful RCLED students showed particular strength in their understanding and practice of CRP. This study also supported the use of the CRIOP tool as a measure of teachers’ culturally responsive pedagogy.

In their qualitative case study, Wiggan and Watson (2016) investigated the experiences and perceptions of teachers and students in a school that purposefully imbues culturally responsive pedagogy into its classrooms and curriculum. The student population at the school is 100% African American and is small in size (100 students with 12 teachers). The curriculum at the school includes a wide variety of multicultural texts and resources, and the school specifically seeks to combat the traditional racial hegemony found in typical school curricula (Wiggan & Watson, 2016). The researchers conducted interviews and classroom observations with 15 students, four teachers, and one administrator of the school. The researchers used open and axial coding methods to analyze the observation and interview data, resulting in themes and sub-themes based on patterns within the data. The primary theme that emerged from the data in this study was the importance of the interconnectedness at the school between students, teachers, school staff, families, and the community at large (Wiggan & Watson, 2016). This theme was evidence of the culturally responsive pedagogy permeating the school; the school was a community of learners, connected to one another and to the community at large. Several interview responses noted the importance of community and togetherness in African American culture, as well, underscoring its cultural relevance for the students at this
school (Wiggan & Watson, 2016). A subtheme that emerged from the data was cultural responsiveness, again reflecting the multicultural and anti-racism curriculum of the school. These findings reflect the idea that culturally responsive pedagogy leads to a variety of successful outcomes for students.

Plucker and Callahan (2014) noted that there is a dearth in research on improving both opportunity and achievement for minority students in programs for the gifted. Ladson-Billings (1995) called for research studies, such as her own study on exemplary teachers of African American students, that tell us more about “the practice of successful teachers of African American and other students who have been poorly served by our schools” (p. 163). Morrison, Robbins, and Rose (2008) suggested the need for research on teachers’ use of CRP in heterogeneous, multicultural settings. Sleeter (2012) reiterated the need for more empirical research that relates culturally responsive pedagogy to student outcomes. Powell et al. (2016) described the need for research that examines how effective CRP is with regard to closing achievement gaps. While research exists presently that examines CRP and its effects, little research exists that looks at the use of CRP in the AP environment. In relation to my study, one might expect to observe the tenets of CRP in action in a multicultural AP classroom where RCLED students are successful. Examining teachers’ beliefs about CRP as well as observing teachers’ culturally responsive practices offers insight into how teachers of successful AP RCLED students think and behave in order to foster such success.

**Tenets of CRP.** According to Gay (2010) culturally responsive pedagogy rests on five fundamentally interrelated tenets. First, culturally responsive pedagogy rests on the
assertion that culture cannot be separated from the interaction of teachers and students and how and what they learn in school. As Bruner (1996) stated, “A theory of education necessarily lies at the intersect between [the nature of mind and the nature of culture]” (p. 13). Education is culture-bound and the way in which the teaching and learning process unfolds is a complex interplay that necessarily involves the culture(s) of those involved. Second, culturally responsive pedagogy assumes that “conventional reform is inadequate” (Gay, 2010, p. 13) mainly because most reform efforts aimed at improving achievement of diverse learners are rooted in a “deficit” mentality (Ford & Grantham, 2003). That is, most reform programs are focused on the presumed gaps in knowledge or skills of RCLED learners, rather than building on these students’ cultural assets. The third tenet is that, while many educators have good intentions about not discriminating against diverse learners and may even be aware of cultural differences in teaching and learning interactions, these two states of being are not enough. “Goodwill must be accompanied by pedagogical knowledge and skills as well as the courage to dismantle the status quo” (Gay, 2010, p. 14). Fourth, culturally responsive pedagogy is rooted in the belief that cultural diversity is a strength, one often untapped in education, and therefore is a powerful resource for improving the achievement of diverse learners. Finally, culturally responsive pedagogy asserts that diverse learners’ test scores and grades are symptoms of achievement problems rather than the causes of the problems. In other words, the scores the students earn do not explain why their performance on such assessments is below expectations, just that it is. More careful analyses of test scores and the types of assessments being used are necessary. These five assumptions underpin the
theory and methods of culturally responsive pedagogy and are key understandings of this approach.

Culturally responsive pedagogy in practice takes a variety of forms. One example is the inclusion of literature from many cultures, including the home cultures of students in the class, into the literature curriculum. In a history class, culturally responsive pedagogy might include, for example, lessons that teach “factual information about American Indians rather than using only the European version of American history” (Penland, 2010, p. 448). Another hallmark of CRP is the cultivation of a classroom climate that “promote[s] equity and mutual respect among students… [where] all students feel fairly treated and respected” (Richards, Brown, & Forde, 2007, p. 67). According to Powell and Rightmyer (2011), CRP, at heart, is about “validating our students as learners” (p. 3) by eliminating deficit thinking and enacting teaching practices that connect the curriculum to students’ lives.

Regardless of practical methodology, all teaching and learning methods that are culturally responsive affirm the fundamental importance of race and ethnicity in learning. Culturally responsive pedagogy permeates all areas of education, from curriculum to instruction, from teachers forming caring relationships with students and examining their own prejudices and assumptions about race and culture to creating meaningful relationships between families, communities, and schools (Gay, 2010; Powell & Rightmyer, 2011). Furthermore, culturally responsive pedagogy is an approach to teaching and learning for diverse students that is at once validating, comprehensive, multidimensional, empowering, transformative, and emancipator (Gay, 2010). It is
validating because it provides learning opportunities where students see their own identities reflected in positive and empowering ways. Achievement is improved as a direct result. Culturally responsive pedagogy is comprehensive in that is focused on the whole child in ways that foster the students’ growth in “intellectual, social, emotional, and political learning” (Gay, 2010, p. 32). It is multidimensional, using students’ cultural diversity to cross content areas and classroom interactions. Culturally responsive pedagogy is empowering because students come to believe that they are high-achievers and learn that mastery involves an element of risk-taking and perseverance. It is transformative because it changes fundamentally the way that schools educate students of diverse racial, linguistic, and cultural backgrounds. Finally, it is emancipatory because “it releases the intellect of students of color from the constraining manacles of mainstream canons of knowledge and ways of knowing” (Gay, 2010, p. 37). It values and validates the ways of knowing across many cultures thereby freeing students of color from the futile and frustratingly painful attempt to fit into the traditional Euro-centric way of knowing.

**Culturally responsive caring.** With regard to my study, there is one tenet of culturally responsive pedagogy that requires particular attention. As mentioned, teacher caring is a central piece of culturally responsive pedagogy (Gay, 2010). Noddings (1988), one of the foremost educational researchers on the topic of caring, suggested that teacher caring forms the foundation of a moral education. Caring teachers are invested in their students as people, both in terms of their academic success and growth and their personal success and growth (Noddings, 1988). She went on to say that this care is manifested in
the respectful, considerate relationships that the teacher builds with her students and the way that she expects students to behave similarly toward others (Noddings, 1988). While teacher caring is important for all students, is it especially important for minority students (McCollum, 2014). Indeed, according to Perez (2000), “the care, understanding, and sensitivity teachers show [culturally diverse] students may, in the final analysis, be the most important influence on academic performance” (p. 105).

Noddings (1988) stated that caring teachers “use teaching moments as caring occasions” (p. 223). Teacher caring as culturally responsive pedagogy can take a variety of forms, including traditional conceptions of caring as kindness as well as teachers’ use of instructional practices that empower students and help them succeed academically (Gay, 2010). Others have noted similar indicators of culturally responsive teacher caring including respect, high expectations, and cultivating personal relationships (Garza, 2009; Gay, 2010; McCollum, 2014). The notion of teacher caring as culturally responsive pedagogy is particularly relevant to my study, as discussed in detail in the following chapters.

Garza (2009) studied high school students’ perceptions of teacher caring, with a specific interest in whether Latino and White students viewed teacher caring similarly or differently. The researcher conducted interviews, observations, and gathered questionnaire responses. His study participants were 49 Latino students, 44 White students, and two female teachers, one Latina and one White. The researcher interviewed each teacher about her relationships with students, her beliefs about caring for students, and thoughts on creating a caring classroom. He also observed the teachers’ actions on
several occasions, both in and out of the classroom. He took field notes on caring interactions observed between the teachers and their students. The student participants completed an open-ended questionnaire about their teacher’s caring behaviors (Garza, 2009). The researcher analyzed each data source by coding words and phrases that reflected teacher caring, both in thought and in action. Then, through constant comparative analysis, the researcher grouped the data according to patterns and themes. Five themes emerged from the data. The most frequent theme in the data was that teachers show caring by providing scaffolding during their teaching. Second, caring teachers are kind in their words and in their actions. The third theme was that caring teachers make themselves available to help students. Fourth, caring teachers exhibit an interest in their students personally, both in and out of the classroom. Finally, caring teachers offer “affective academic support” (Garza, 2009, p.310). It is also important to note that the researcher found that there was some variance between the responses of the Latino students and those of the White students. The Latino students more frequently noted the first theme, providing scaffolding, as exemplary of teacher caring, whereas the White students more frequently mentioned kindness in actions as evidence of teacher caring (Garza, 2009).

This study reveals two important ideas related to teacher caring as culturally responsive pedagogy. First, caring is perceived by students in a variety of ways, including the ways that a teacher helps her students succeed academically. Second, not only is teacher caring a culturally responsive attribute, it is in itself a cultural construct. What caring looks like or feels like to one student from one cultural background may be
different than what it means to be caring for a student from a different cultural background. Teacher caring is, therefore, is both evidence of culturally responsive pedagogy and requisite of cultural responsiveness.

**Summary**

In discussing the nature and implications of excellence gaps, it is important not to overlook the fact that many racial and ethnic minority students are already among the highest achievers (Smith et al., 2011). However, the fact that some students have been able to overcome the barriers to equality at the highest levels of achievement in our public schools cannot be used as an excuse to ignore the reality that many are still excluded from opportunities for challenge and rigor in public schools. Likewise, we must acknowledge and address the fact that, even when included in challenging coursework, racial and ethnic minorities routinely under-perform their White classmates, even in schools and districts where a variety of supports and empowering policies already exist. Progress toward equality in excellence is insufficient. Stakeholders must continue to seek ways in which we can continue making progress until excellence gaps disappear for all students.

In sum, if we are to eliminate achievement gaps at all levels of achievement, from minimum competency through the highest academically challenging levels, the goal of public education in the United States must be one of “group-proportional racial equity in achievement” (Ferguson, 2007, p. 285). One of the most important mechanisms for reaching this goal has to do with what happens inside the classroom. Dr. James Gallagher, a pioneer in efforts to create equity in gifted education, pointed out over 40
years ago that teachers must bring culturally relevant pedagogy to students in order to nurture the potential in all children (Coleman & Shah-Coltrane, 2015). Ladson-Billings (2009) suggested that teachers’ beliefs and classroom interactions are integral elements to a culturally responsive classroom climate. The AP teacher’s beliefs about students and their potential to achieve, his or her day-to-day interactions with RCLED students, and the level to which he or she practices culturally responsive pedagogy are all variables which can affect RCLED students’ success; this success is then one outcome that we can look at to gauge how the Excellence Gap may be affected by teacher characteristics. These are the principles that underlie this research study.

In Chapter Three, I describe the methods I used to conduct my study. Included in this description are the research setting, participants, data collection and analysis methods, and limitations to my study. The discussion of methods is followed by consideration of the findings of my study in Chapter Four and a discussion of conclusions and implications of these findings in Chapter Five.
Chapter Three

The Excellence Gap as viewed through the lens of Advanced Placement classes is an area that requires more attention in educational research. Students of color and linguistic diversity have been historically underrepresented in programs for gifted and advanced learners (College Board, 2014; de Wet & Gubbins, 2011, Moore & Slate, 2008; Peters & Engerrand, 2016; Whiting & Ford, 2009). At the same time, these high potential students hold the key to future advancements and innovations. It is crucial, therefore, to investigate strategies that schools can use to close these pervasive gaps at advanced levels of learning. Through this study, I examined the beliefs and practices related to culturally responsive pedagogy of AP teachers whose racially, culturally, linguistically, and ethnically diverse (RCLED) students had previously been successful on the AP end-of-course exam as a potential tool for understanding and reducing the Excellence Gap in AP classes. The previous chapters discussed the problem of the Excellence Gap, its importance, and the literature related to the problem. This chapter describes the methodology I used to study AP teachers’ culturally responsive beliefs and pedagogy. The research questions guiding this study were:

1. What are the educational and professional development experiences of teachers of AP courses who have shown consistent success with Advanced Placement racially,
culturally, linguistically, and ethnically diverse (RCLED) students? (‘‘Success’’= a score of 3+ on AP exam)

2. What are these teachers’ beliefs about teaching Advanced Placement RCLED students?

3. In what ways do AP teachers who are successful with AP RCLED students exhibit aspects of culturally responsive pedagogy (CRP) in their practice?

I studied Advanced Placement teachers using a qualitative case study design. To accomplish this study, I selected participants, conducted semi-structured interviews and classroom observations, and analyzed data using inductive and deductive thematic analysis. The procedures and background for these steps are described in the following sections of this chapter: participants, setting, research design, procedures, and data analysis.

Participants

Before beginning my participant selection, I completed the requirements for Institutional Review Board approval for my research with George Mason University. A copy of the letter giving IRB approval for my study is found in Appendix A. I also formally requested and received permission to conduct my research in Avanelle County Public Schools from their Office of Planning and Evaluation. Once I had these approvals, I began my search for study participants.

Participant selection. I chose participants for this study through purposeful homogeneous sampling. Maxwell (2005) stated that purposeful sampling is appropriate when the researcher’s goal ‘‘is to deliberately examine cases that are critical for the
theories that you began the study with” (p. 90). Purposeful homogeneous sampling is a fitting sampling method when the researcher seeks to describe a particular subgroup in depth (Creswell, 2008). I used this sampling method because my goal is to describe the beliefs and culturally responsive pedagogy of a particular subgroup, that is, AP teachers of successful RCLED students, in detail.

I began by contacting the principals in the four high schools from Avanelle County Public Schools (ACPS). I initially contacted the principals by email. A copy of the initial contact letter used to solicit principals’ nominations for possible participants who fit the criteria for my study is found in Appendix B. In this email I explained who I am and gave a general explanation of my study and its goals. I asked principals to identify from their schools AP teachers (except AP world languages and AP visual/performing arts as discussed subsequently) whose RCLED students have been successful on the AP exam as possible study participants. This method of participant nomination is supported by the work of Ladson-Billings (2009). In her ethnographic study on exemplary teachers of African American students, Ladson-Billings (2009) gathered her list of possible participants by asking community members to nominate teachers and then cross-checked the list of possible participants with school principals and teaching colleagues. It was from this list that she drew her final participant list of eight teachers to study (Ladson-Billings, 2009). Using this nomination process was appropriate for this study because principals would have the knowledge of which AP teachers in his or her school have a history of success with AP RCLED students, or would be able to easily designate another staff member (such as an Assistant Principal or
Resource Teacher for the Gifted) who would be able to identify such AP teachers.

Despite the research support for this type of nomination process in participant selection, the process was ultimately unsuccessful, since each principal I contacted declined to nominate any teachers from his or her school. Rather, the principals suggested I contact teachers individually myself.

In order to identify which teachers would be candidates for my study, I analyzed AP test data provided to me by the Avanelle County Public Schools’ Office of Assessment and Evaluation. The ACPS AP data listed AP testing outcomes for students by racial/ethnic subgroup and linguistic subgroups for each AP teacher in each ACPS high school. Using this data, I identified which teachers fit the criteria for my study. In order to identify possible participants, I examined the data teacher by teacher, looking at how each subgroup of RCLED students in each teacher’s class scored on the AP exam in comparison to the ACPS scores as a whole for each subject. I included as possible participants any AP teacher (except for AP world languages and AP art) whose RCLED students in one or preferably more than one RCLED subgroup scored higher than the county average on the AP exam. I excluded the subject areas of AP world languages and AP art because RCLED students’ success in these areas may be attributable to factors such as native language or innate artistic/creative ability, factors which may be less influential in other AP subjects. In examining the data from the remaining AP subject areas, I paid particular attention to teachers with several high scoring RCLED subgroups and teachers with significantly higher than average scores within a subgroup. This resulted in a list of approximately 50 potential study participants. From this list I
eliminated teachers where the only qualifying subgroup had three or fewer students, leaving 39 possible participants.

I contacted the potential AP teacher-participants by sending an email introducing myself and offering a brief explanation of my study. I stated that I was seeking to study successful ACPS Advanced Placement teachers; I did not, however, mention that I am seeking to observe culturally responsive pedagogy (CRP) in particular, just that I wished to interview the teachers about their experiences teaching AP RCLED students and observe their classes. It was important at this stage to be open enough about the focus of my study so that the teachers would know I was interested in their experiences teaching AP RCLED students as opposed to all AP students. However, I did not want to lead the teachers’ responses or influence their actions by using the specific terminology of CRP. Rather, I wanted to see if the language and tenets of CRP revealed themselves in the participants’ interviews and observations. I do not believe that this was misleading the participants, however, as the overall focus on AP RCLED students’ success in these teachers’ classes was revealed at the start. A copy of the email sent to teachers can be found in Appendix C.

At this time, I also told the potential participants that, if they agreed to be a part of the study, I would interview them and observe them teaching an AP class at least twice. I assured them of their anonymity throughout the study. Of those teachers who agreed to participate, I had initially hoped to have a total of no fewer than five teachers from a variety of AP subject areas (except AP world languages and AP visual/performing arts, as
noted earlier.) This would allow me to better examine the role of the culturally responsive
teacher in the AP setting.

It is important to note here that I had hoped to avoid using AP teachers from the
school in which I am a teacher in my study due to possible added limitations from having
prior professional relationships with the teacher-participants. I included teachers from my
school in the initial contact list in the event that I did not receive enough participation
from the other three high schools. This is precisely what happened. Despite repeated
contacts (up to four) over the course of approximately two months, including several
emails and personal contact from other teachers with mutual acquaintance, only one
teacher from a school outside my own volunteered to participate in my study. Several AP
teachers from the list of potential participants at my school volunteered to be included in
the study, however. Ultimately, I decided to use only teachers from my school (North
High School) in the study and to focus the study as a single case study of AP teachers of
successful RCLED students in one particular school. This is discussed subsequently as a
potential limitation to this study.

**Participant description.** There are a few germane facts about the teaching staff
as a whole in Avanelle County that inform the description of the research setting and
participants. For example, according to the county’s website, the average Avanelle
County teacher has ten years of experience. This indicates that there is minimal teacher
turnover and that teachers who work in Avanelle County tend to stay in Avanelle County.
Furthermore, 79% of Avanelle County teachers have a Masters degree or higher. As
reported by the county in August 2016, 164 Avanelle County teachers have achieved
National Board Certification; this represents the third greatest percentage of NBCTs of any county in the state. Avanelle County encourages and supports teachers seeking National Board Certification both financially and through professional development courses. The system offers a wide variety of professional development opportunities, both within the county and beyond, to encourage a culture of continuous learning and growth among the teachers and staff in Avanelle County. With regard to Advanced Placement, all teachers in Avanelle County who work with gifted or Advanced Placement students are required to complete a minimum of 3 semester hours or 40 in-service hours of training in the area of gifted education or teaching methods for advanced students. In a report prepared for the College Board, Laitusis (2012) reported that schools whose teachers had a higher level of participation in Advanced Placement professional development had a greater rate of AP student success on end-of-course exams (success meaning a score of three or higher on the exam). Most teachers in Avanelle County who wish to teach an AP level course attend the week-long Advanced Placement training conducted by the College Board prior to teaching an AP level class. In most cases, the county and/or the teacher’s home school subsidizes the cost of attending this training.

Five teachers of Advanced Placement courses participated in this study. Two were AP Psychology teachers. In addition, there was one AP World History teacher, one AP Physics teacher, and one AP English Language and Composition teacher. These subject areas were not purposefully chosen; rather, they are representative of teachers who met the study selection criteria and who volunteered to participate. All teachers provided demographic data at the start of the study.
Table 1

*Participant Demographic Data*

<table>
<thead>
<tr>
<th>Participant</th>
<th>Course Taught</th>
<th>Total Years Teaching</th>
<th>AP Years Teaching</th>
<th>Race/ethnicity</th>
<th>Second Language</th>
<th>Masters Degree (Y/N)</th>
<th>NBCT (Y/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matt</td>
<td>Psychology</td>
<td>5</td>
<td>3</td>
<td>White</td>
<td>French</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Whitney</td>
<td>Physics</td>
<td>24</td>
<td>14</td>
<td>White</td>
<td>No</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Cara</td>
<td>World History</td>
<td>17</td>
<td>5</td>
<td>White</td>
<td>No</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Tiffani</td>
<td>Psychology</td>
<td>11</td>
<td>9</td>
<td>White</td>
<td>Japanese</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Brian</td>
<td>English Lang. &amp; Comp.</td>
<td>3.5</td>
<td>3</td>
<td>White</td>
<td>French</td>
<td>Y</td>
<td>In process</td>
</tr>
</tbody>
</table>

*Note.* All names are pseudonyms. NBCT = National Board Certified Teacher.

As Table 1 shows, aside from the fact that all the teacher participants hold Masters degrees and all are White, there are a handful of significant similarities among all the teachers. Three of the five teachers speak a second language. Likewise, three are National Board Certified Teachers while one was currently pursuing National Board Certification. Also, all had previously completed the College Board’s AP training in their respective subject areas. These trends point to the fact that all the teachers in the study have pursued higher education and professional development in their fields in keeping with county-wide teacher trends.

The participants in this study were selected, in part, as a result of their AP RCLED students’ achievement on the end-of-course exam in their particular subject area.
Relative to ACPS averages in the same subject areas, these teachers’ RCLED students showed greater success (earning a score of 3 or better on the AP exam) in one or more RCLED subgroups, as seen in Table 2.
<table>
<thead>
<tr>
<th>Participant</th>
<th>Course</th>
<th>Subgroup</th>
<th>Teacher % Pass</th>
<th>County % Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matt</td>
<td>Psychology</td>
<td>Asian</td>
<td>44%</td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Black</td>
<td>50%</td>
<td>38%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hispanic</td>
<td>46%</td>
<td>47%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>67%</td>
<td>63%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>White</td>
<td>79%</td>
<td>78%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LEP</td>
<td>40%</td>
<td>20%</td>
</tr>
<tr>
<td>Whitney</td>
<td>Physics B</td>
<td>Asian</td>
<td>100%</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Black</td>
<td>n/a</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hispanic</td>
<td>60%</td>
<td>30%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>100%</td>
<td>33%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>White</td>
<td>74%</td>
<td>38%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LEP</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Cara</td>
<td>World History</td>
<td>Asian</td>
<td>75%</td>
<td>80%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Black</td>
<td>0%</td>
<td>57%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hispanic</td>
<td>65%</td>
<td>63%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>80%</td>
<td>93%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>White</td>
<td>75%</td>
<td>78%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LEP</td>
<td>50%</td>
<td>67%</td>
</tr>
</tbody>
</table>
Each of the participants had at least one subgroup of students that was more successful on the end-of-course exam than the county average. Several, including Matt, Whitney, and Brian, had several subgroups that outperformed the county average. Hence, the teachers met the criteria for inclusion for my study.

**Setting**

Avanelle County is located in a close-in suburb of a large East coast city. While the county is quite small at only 26 square miles in area, the county website reports that it is nonetheless quite populous with over 220,000 residents. The county has a vast array of public services, including over 160 parks, 14 community centers, and nearly 90 miles of

<table>
<thead>
<tr>
<th></th>
<th>Psychology</th>
<th>Asian</th>
<th>55%</th>
<th>50%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiffani</td>
<td></td>
<td>Black</td>
<td>38%</td>
<td>38%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hispanic</td>
<td>43%</td>
<td>47%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>50%</td>
<td>63%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>White</td>
<td>79%</td>
<td>78%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LEP</td>
<td>25%</td>
<td>20%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>English Lang. &amp; Comp.</th>
<th>Asian</th>
<th>75%</th>
<th>56%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brian</td>
<td></td>
<td>Black</td>
<td>n/a</td>
<td>33%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hispanic</td>
<td>88%</td>
<td>55%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>67%</td>
<td>61%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>White</td>
<td>87%</td>
<td>82%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LEP</td>
<td>n/a</td>
<td>25%</td>
</tr>
</tbody>
</table>
biking and walking trails. Its residents are relatively prosperous and well-educated.
According to the county’s website, the median 2016 household income in Avanelle County was $110,900, well above the national median income of $53,657 (DeNavas-Walt & Proctor, 2015). Poverty is not, therefore, a primary issue for the majority of students in Avanelle County; the county website reports that 31.4% of students receive subsidized meals. The school system’s website also reports that 71.7% of the county’s residents hold Bachelor’s degrees and 37.4% of its residents hold graduate degrees, indicating that education is a priority for many families in the county. The county reports that 91% of its high school graduates go on to attend a two- or four-year college upon leaving the county school system, and 75% of graduates have taken at least one college-level course (Advanced Placement, International Baccalaureate, or Dual Enrollment) during their time in ACPS.

At the same time, Avanelle County is also quite diverse. According to the county school system’s website, students in the county’s schools represent 116 different nationalities and speak 104 different languages. The county has a rich and widely respected ESOL program, serving Pre-K through adult English Learners. Of just over 26,000 students, 46.9% are White, 27.9% Hispanic, 10.3% African American, 9.0% Asian, 5.4% Multiracial, and 0.5% American Indian, Native Alaskan, Native Hawaiian, or Pacific Islander.

All four high schools in Avanelle County have consistently been named among the top high schools in the nation and each reports that over 90% of their graduates go on to post-secondary education. Each of the four high schools in Avanelle County has a
unique and influential school culture. According to the country school system’s website, South High School has the county’s largest minority population, with 45% of its 1,917 students identified as Hispanic, 20.7% Black, 20.2% White, 8.8% Asian/Pacific Islander, 4.7% Multiracial, and 0.7% Other. Nearly half of the students at South High School are eligible for free or reduced lunch. The school has several programs designed to support their diverse student population, including a cohort program to support African American and Hispanic males. The school is also the home of the county’s Spanish Immersion Program for the high school level. The county’s largest high school, Central High, is also quite diverse, with 41.2% of its 2,334 students identified as White, 34.1% Hispanic, 9% Black, 10.4% Asian, 5.1% Multiracial, and 0.3% Other. Just over 31% of students at Central High are eligible for free or reduced lunch. Central High is also the only high school in the county that offers the International Baccalaureate Diploma program. The third high school is the Berkeley Program, a non-traditional secondary school consisting of 684 students from grades six to twelve. The focus at the Berkeley Program is on student choice and independence. For example, the school holds regular town meetings where students, teachers, and parents all have equal voices in decision-making for the school. The demographics for the Berkeley Program are similar to those of North High School, the setting for this research study.

The teachers who participated in this study were all employed at North High School in Avanelle County at the time of the study. North High School is located in the northern part of Avanelle County. North High School (NHS) boasts a focus on the whole child, having won several awards for its focus on social and emotional learning in
addition to its traditional college preparation curriculum. Recently, a well-respected regional newspaper included North High School in its list of the top ten most challenging academic high schools in the area. In addition, NHS has various special programs and initiatives, including the “Center for Leadership and Public Service” and the “AP Scholars” program. It is the least diverse of the four high schools in Avanelle County, with 64.3% of its 1,877 students identified as White, 5.4% African American, 15.7% Hispanic, 9.2% Asian, 4.8% Multiracial, and 0.4% American Indian, Native Alaskan, Native Hawaiian, or Pacific Islander. North High School has a relatively low percentage of students receiving subsidized meals at 12.35%.

There is a marked focus at North High School on Advanced Placement course participation. In 2016, North High School reported that 904 students in the school (total school enrollment of just under 1,900) took 2,317 AP exams. Compared to the national AP enrollment of about 14% of all high school students enrolled in one or more AP courses (Finn & Wright, 2015), North High School students have a comparatively much higher rate of AP enrollment. Success in an Advanced Placement course is measured by the end-of-course exam given in each subject area. Scores on the exam range from one to five, with a score of five indicating that the exam taker is “Extremely well qualified” to receive college-level credit for the subject are tested, and a score of three indicating that the exam taker is “Qualified” to receive college credit (College Board, 2014). A score of three on the AP end-of-course exam is generally accepted as indicative of mastery of the college level material included in the course curriculum (Finn & Wright, 2015). In 2016, 64.5% of the end-of-course AP exams taken at NHS received a score of at least three or
higher. Overall, 75.1% of students taking AP exams in 2016 earned a three or higher on at least one of the exams taken (statistics provided by North High School). Seventy-three point two per cent of the graduating seniors at North High School in 2016 had earned a score of three or higher on at least one AP exam during their four years at NHS.

The breakdown of scores on the AP end-of-course exam of students of the teacher participants in this study is shown in Table 3.
Table 3

**AP Exam Results for Study Participants by Student Scores Earned, 2014**

<table>
<thead>
<tr>
<th>Participant</th>
<th>Exam Subject</th>
<th>Test Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Matt</td>
<td>Psychology</td>
<td>14</td>
</tr>
<tr>
<td>Whitney</td>
<td>Physics B</td>
<td>4</td>
</tr>
<tr>
<td>Cara</td>
<td>World History</td>
<td>7</td>
</tr>
<tr>
<td>Tiffani</td>
<td>Psychology</td>
<td>25</td>
</tr>
<tr>
<td>Brian</td>
<td>English Lang. &amp; Comp.</td>
<td>0</td>
</tr>
</tbody>
</table>

As seen in Table 3, the AP students in the study participants’ classes were highly successful on their end-of-course AP exams. In each case, the majority of students in the teacher participants’ classes earned a score of three or higher on the respective AP exam. According to the College Board’s (2014) *Student Score Distributions* report, 65.5% of all 2014 test-takers in AP Psychology scored a three or higher. Comparatively, 72.3% of Matt’s AP Psychology students passed the exam in 2014 and 68.3% of Tiffani’s students passed. In Physics B, the national pass rate in 2014 was 60.7% (College Board, 2014), while 73.3% of Whitney’s students scored a three or higher in 2014. In AP World History, the national pass rate was 54.5% (College Board, 2014) while 73.7% of Cara’s students passed the exam. In AP English Language and Composition, the 2014 national
pass rate was 55.8% (College Board, 2014). Eighty-five point nine per cent of Brian’s AP English Language and Composition students passed the exam. Hence, the score distributions seen in Table 3 for the study participants’ classes are well above the national norms for the same year of testing, highlighting their success as teachers of Advanced Placement classes and reflecting the relative success of AP students at North High School.

**Research Design**

I used a qualitative case study research design framework for this study. Methodologically, I conducted in-depth semi-structured interviews and classroom observations of five teachers who have shown success with AP RCLED students. Through these observations and interviews, I sought to understand how these teachers exhibit culturally responsive beliefs and practices as a means of fostering success with AP RCLED students. Case study is appropriate, therefore, since, as a researcher, I sought to “uncover the interaction of significant factors characteristic of the phenomenon” (Merriam, 2009). In essence, I sought to discover if and how AP teachers whose AP RCLED students have been successful on the end-of-course AP exam demonstrate culturally responsive pedagogy, both in their classroom practices and in their beliefs about teaching and students. According to Thomas (2013), case study is an appropriate research design for this purpose because it allows the researcher to “excavate, elaborate, and explicate” (p. 599) her own “explanatory framework” (p. 597) of the phenomenon being examined in the study.
For the observation portion of this study, I used the *Culturally Responsive Instruction Observation Protocol (CRIOP)*, (3rd Edition) (Powell et al., 2014). The CRIOP is a tool used to evaluate culturally responsive instruction (or culturally responsive pedagogy, as I have referred to it in this study) in the classroom. The CRIOP was developed after a state-wide research study examining the effects of a reading intervention revealed two important findings (Malo-Juvera, Powell, & Cantrell, 2013). First, achievement data from a three-year time period revealed a persistent achievement gap between White students of middle and high socio-economic classes and students of color and lower socio-economic classes (Malo-Juvera et al., 2013). Second, researchers noted that very few examples of culturally responsive instruction were noted in the classrooms they observed (Malo-Juvera et al., 2013). Researchers became aware, however, that the observation tool they were using was not a reliable measure of CRP (Malo-Juvera et al., 2013). Hence, the researchers set out to develop a tool that supplies “observational indicators that can be used to assess teachers’ relational behaviors with students and families along with indicators in more readily observable practices such as curriculum, instruction, and classroom discourse” (Malo-Juvera et al., 2013, p.4). The result of this effort was the *Culturally Responsive Instruction Observation Protocol* (CRIOP).

After a broad literature search, the researchers gleaned eight common themes of CRP which then became the categories of the CRIOP: Classroom Caring/Teacher Dispositions; Classroom Climate/Physical Environment; Parent Collaboration; Assessment; Curriculum/Planned Experiences; Pedagogy/Instructional Practices;
Discourse/Instructional Conversation; and Sociopolitical Consciousness/Multiple Perspectives (Malo-Juvera et al., 2013; Powell & Rightmyer, 2011). After development, the CRIOP was field-tested, revised, and reviewed by outside reviewers for content validity (Malo-Juvera et al., 2013). In 2008-2009, researchers field-tested the CRIOP in a total of six racially, ethnically, and economically diverse schools across the state of Kentucky. Subsequent analysis of observers’ ratings using the CRIOP showed that the instrument has “good estimates of reliability and interrater rater reliability, lend[ing] strength to the argument that the CRIOP is a consistent assessment of culturally responsive instruction and that it may be used by various raters while still maintaining good interrater reliability estimates” (Malo-Juvera et al., 2013, p.8-9). The overall interrater reliability using the 2008 field test data was Cohen’s Kappa = 0.82 (p < .001) (Malo-Juvera et al., 2013). Cronbach’s alpha on the 2008 field test data was .94, while on the subsequent 2008-2009 data, Cronbach’s alpha was .88 (Malo-Juvera et al., 2013). According to these data, the CRIOP shows good to excellent internal and interrater reliability, and thus is an appropriate tool to observe CRP in classroom settings.

The CRIOP tool is used to examine teachers’ behaviors in the classroom through the lens of six pillars of culturally responsive pedagogy based on the themes identified in the developers’ literature search noted above. The six pillars of the CRIOP are: I: Classroom Relationships; II: Family Collaboration; III: Assessment Practices; IV: Instructional Practices; V: Discourse; and VI: Sociopolitical Consciousness (Powell et al., 2014). Pillar I: Classroom Relationships includes elements of a caring, respectful classroom environment (Powell & Rightmyer, 2011). In a culturally responsive
classroom, evidence of this pillar might include things like a teacher who is a warm
demander, who shows respect for the students while expecting that they give their full
effort at all times. This pillar might also be evidenced by students and teachers working
together, with the teacher scaffolding instruction and the students helping one another
and working collaboratively (Powell & Rightmyer, 2011). One would also expect to see a
classroom environment that reflects an appreciation for diversity in terms of the artifacts
(books, posters, etc.) within the classroom (Powell & Rightmyer, 2011). CRIOP Pillar II:
Family Collaboration is evidenced by classrooms where the teacher seeks parents’ or
caregivers’ knowledge and expertise in order to know the student better and therefore be
able to teach the student better. Teachers might conduct home visits or meet parents
outside of the school environment in order to establish meaningful relationships (Powell
& Rightmyer, 2011). Evidence of CRIOP Pillar III: Assessment Practices that are
culturally responsive include the use of formative assessments, authentic assessments,
self-assessments, and assessments that might measure the achievement of the group, not
just the individual (Powell & Rightmyer, 2011). Pillar IV: Instructional Practices
examines the cultural responsiveness of the teacher’s pedagogy. In a culturally responsive
classroom, one might expect to see things like hands-on activities, collaboration (teacher-
student and student-student), curricula and tasks that are contextualized in student’s lived
experiences, and student choice as evidence of this pillar (Powell & Rightmyer, 2011).
CRIOP Pillar V: Discourse examines the discourse patterns in the classroom. A culturally
responsive classroom would be characterized by shared control of the classroom
discourse (i.e. not teacher-dominated), culturally responsive and equitable patterns of
discourse, such as call and response and overlapping conversations, and protocols aimed at developing students’ linguistic competence (Powell & Rightmyer, 2011). Finally, CRIOP Pillar VI: Sociopolitical Consciousness includes practices such as allowing students to question the status quo and investigate issues that are meaningful in their lives, schools, and communities. In culturally responsive classrooms, challenging stereotypes and biases and promoting understanding of differing perspectives would be evidence of Pillar VI (Powell & Rightmyer, 2011).

The CRIOP protocol requires the observer to take field notes every five minutes during the observation. After extensive review of the researcher’s field notes, she assigns a holistic score for each pillar of the CRIOP. There are several fields of consideration for each pillar; the CRIOP tool provides a description of each as well as examples and non-examples of culturally responsive methods for each field within each pillar. For example, under CRIOP Pillar II: Family Collaboration, there are three indicators on the CRIOP tool rubric. These indicators help guide the observer. Indicator 1 in this domain asks the observer to gauge how well the subject established “genuine partnerships (equitable relationships) with parents/caregivers” (Powell et al., 2014). Alongside this indicator are examples and non-examples of the indicator. For example, in a culturally responsive classroom, evidence of this indicator might include, “Parents’/caregivers’ ideas are solicited on how best to instruct the child; parents are viewed as partners in educating their child” (Powell et al., 2014). An example of a non-responsive classroom, on the other hand, is “Parents’/caregivers’ suggestions are not incorporated in instruction” (Powell et al., 2014). Each pillar includes several indicators, and there are several examples and
non-examples given for each indicator in order to guide the observer to a holistic assessment of each.

After researching and reading about the CRIOP, I decided that, even though it was originally designed for use in a literacy classroom, the CRIOP tool would be useful in observing the Advanced Placement classroom, as well. Indeed, the CRIOP is a tool that is meant to observe culturally responsive teaching, therefore not just in the realm of literacy (Powell & Rightmyer, 2011). While some of the pillars are more expressly focused on literacy instruction in particular, the tool itself offered a lens through which culturally responsive instruction, in general, could be observed. Powell & Rightmyer (2011), in discussing culturally responsive teaching practices, noted that they are appropriate for all students and are focused on creating environments that nurture and empower all students to achieve. After using the CRIOP tool in the study, however, I came to realize that its original conception with the framework of literacy instruction did in fact lead to some disconnects when transferring to the AP classroom. These issues are discussed subsequently.

In November 2013, I contacted Dr. Powell and Dr. Cantrell, two of the creators of the CRIOP, to ask if I could use the CRIOP tool in my dissertation research. Dr. Powell responded that they would be happy to allow me to use the observation tool if I agreed to go through training first in order to preserve fidelity and reliability. She indicated that, while several researchers were currently using the CRIOP in their research, it is nonetheless a relatively new model. Initially, Dr. Powell and Dr. Cantrell hoped that we might be able to assemble a group of interested student-researchers to be trained together
(virtually) at George Mason University in tandem with virtual trainings that were to be held in other states. Unfortunately, that plan was hindered by snowstorms that resulted in having to reschedule the training several times. Ultimately, on March 15, 2014, I completed a three-hour virtual training through the University of Kentucky Collaborative Center for Literacy Development. I connected to the training through my computer, as did others who were being trained virtually in other states. I was the only participant from my state being trained on that day. However, the participants were able to speak to each other and we could all see and hear the trainers at the University of Kentucky. We were also able to access the same videos for training and could participate in verbal discussions through the internet. The training was led by Dr. Susan Cantrell, Dr. Rebecca Powell, and Ms. Pam Correll, all of whom worked on the creation of the CRIOP and continue to use it for research and teacher professional development. The training consisted of an overview of the CRIOP followed by three videos (with accompanying interview transcripts) of classroom teaching vignettes that the training participants viewed and then scored using the CRIOP. After scoring, the participants and the trainers discussed the videos, our scores in each domain of the CRIOP, and any discrepant scores or observations. Upon completion of this training, the CRIOP developers agreed to allow me to use the CRIOP tool for my study.

For the interview portion of this study, I used the Family Collaboration Teacher Interview questions that are part of the CRIOP tool. The Family Collaboration Teacher Interview questions are a part of the CRIOP tool used to evaluate the Parent Collaboration category on the CRIOP. For the second part of my interview protocol, I
asked questions based on Ladson-Billings’ (2009) interview protocol. I modified these questions slightly to fit my study’s focus on AP teachers of successful RCLED students. I also gathered demographic information about each participant, including how long they have been teaching, race, and where they earned their teaching degree. I gathered this information through a written response form. Both of the interview protocols I used as the basis for my interview protocol have been shown in previous research (Ladson-Billings, 2009; Powell & Rightmyer, 2011) to garner the types of responses about CRP that I was interested in such as specific instructional practices teachers use to support RLCED students in their classrooms and other supports that exist to support RCLED students’ learning. The interview protocol is included in Appendix D.

**Procedures**

As stated previously, I began the study by seeking nominations from the principals of the four high schools selected as the setting for the study for names of possible teacher participants. I initiated contact with the principals through email. A copy of the email can be found in Appendix B.

After the principals declined to nominate participants, I identified possible participants using 2013-14 AP end-of-course test data provided to me by the Avanelle County Public Schools’ Office of Assessment and Evaluation. In analyzing the data, I looked for teachers whose AP RCLED students had outperformed the county average on the previous year’s end-of-course AP exam. I highlighted any subgroup where the passing rate for that teacher was better than the county average for that subgroup. Next, I disqualified those teachers whose out-scoring RCLED subgroup was three or fewer
students. For example, in some cases, the RCLED subgroup success rate was 100%, hence higher than the county average. However, in some cases, that subgroup consisted of only two students. I felt that success within larger RCLED subgroups would most likely lead me to teachers who were doing something significant in their work with RCLED students that helped lead to their success, and therefore these teachers would be stronger, more dynamic participants. An exception to this criterion was made for certain AP science classes, however, as most of them had relatively few RCLED students in general and I did not want to exclude these sciences as possible subject areas in the study.

Once I had a list of possible participants, I initiated contact through email. A copy of the email can be found in Appendix C. After sending this initial email to all possible participants, I waited approximately four days for an initial response. I received only one affirmative response from this initial email from a teacher in a school outside my own. I contacted this volunteer to schedule a time to discuss the project. We met in person shortly thereafter and the teacher agreed to participate in the study. From the first email contact, I received six affirmative responses from teachers within my school. However, I was still hoping to avoid using teachers in my own school as participants, so I sent a second email to potential non-North High School teachers to follow up on my first contact. After the second email, I did not get any additional study volunteers. I then contacted friends and colleagues who knew some of the possible participants from other high schools to make personal appeals to the potential participants to consider being a part of my study, once again following up with an email request. Again, I did not receive any additional study volunteers from other schools. In the interest of moving forward
with my study, it was at this point that I made the decision to focus the study on teachers in North High School only, understanding that this presented limitations but was nonetheless a necessary compromise to my original study design.

There were six AP teachers at North High School who agreed to participate in the study: two AP Psychology teachers, one AP Calculus teacher, one AP Physics teacher, one AP English Language and Composition teacher, and one AP World History teacher. The AP Calculus teacher was eventually excluded from the study because I was unable to observe her class more than once due to scheduling limitations. Hence, the final group of participants for this study consisted of five AP teachers.

I began by scheduling the interviews. All the interviews took place within the school at a time and place agreed upon by the study participant and me. Interviews were conducted between the months of January and February 2015. At the start of each interview, I gave each participant an informed consent form to review and sign and answered any questions they had about the study. Participants then were asked to provide demographic data in writing. Then I used my interview protocol as the loose structure for the interview. Interviews were audio-recorded. Interviews lasted from between 20 and 60 minutes, depending on the detail provided by the participant and the follow up questions brought about by participants’ responses. At the conclusion of each interview, I scheduled my first classroom observation with each teacher. The first observation typically took place within a week of the interview. The length of each observation varied due to schedules, but each lasted a minimum of 45 minutes. At the conclusion of the first observation, I scheduled the second observation. Again, observations lasted at least 45
minutes. All interviews and observations were conducted between the months of January-May 2015.

Before each classroom observation, I carefully reviewed the CRIOP elements, including the examples and non-examples given in the observation protocol itself and in the book edited by Powell and Rightmyer (2011) that examines each component in detail. During the classroom observations, I followed the CRIOP protocol. This protocol calls for taking written field notes every five minutes during the observation. After each observation, I also took photos (with permission) of the participants’ classroom walls in order to assure accurate recall of artifacts posted in the classroom (e.g. art, posters, messages, student work) during the data analysis phase (these are considered during the scoring of the Classroom Climate/Physical Environment domain in Pillar I of the CRIOP tool). Scores on the CRIOP tool itself are only given after extensive review of field notes, which took place after each observation and after all the observations were completed.

Data Analysis

After completing the participant interviews, I transcribed the interviews using Dragon NaturallySpeaking (version13) software. Because there was an extensive amount of transcription, using Dragon NaturallySpeaking allowed me to accomplish this task in a more time efficient manner. After using Dragon NaturallySpeaking to transcribe the interviews, I reviewed the transcriptions carefully alongside the audio to edit the transcriptions for accuracy.

Interview data was analyzed using typological analysis (Hatch, 2002). I began by coding teachers’ responses using pre-determined codes corresponding to the elements of
CRP in the CRIOP. However, I also allowed for other codes that fall outside the CRIOP. Using the CRIOP domains as initial codes allowed me to triangulate the interview and observation data. I read and coded by hand each transcript at least seven times, each time looking for examples of one CRIOP Pillar, and highlighting each line that corresponded to that Pillar. I also made notes of statements that fell outside of the CRIOP Pillars but were significant or recurring thematically.

Likewise, after each observation, I carefully reviewed my field notes at least seven times each. I coded the observation written field notes using CRIOP domains, identifying examples within the observations of the CRIOP components. If a note could be coded for more than one CRIOP Pillar, I did so. I then used the CRIOP tool to assign a holistic score in each domain of the CRIOP as well as an overall score (the CRIOP portion of the interview was used for Parent Collaboration domain of the CRIOP as prescribed by the protocol).

Once all the interview data was coded, I set up a matrix that allowed me to examine various participants’ interview and observation data within the framework of identified codes. I also allowed space for emerging themes to be noted. An example of the analysis matrix I created is shown in Table 4.

Table 4

Data Analysis Matrix Pillar I. Classroom Relationships

<table>
<thead>
<tr>
<th>Participant</th>
<th>Observation Notes</th>
<th>Interview Data</th>
</tr>
</thead>
</table>

103
Matt

Line 12: teacher jokes that game gets demented more that you play
Lines 15-23: tchr jokes that group of guys may be writing/drawing inappropriate things; “Pictionary rules apply” pass again; giggling then quiet as students work
game ends, groups look at sentences and pictures, lots of chatting and laughter as students see what other students wrote/drew;
teacher circulates, looks at work, interacts with small groups

tchr shares a few with whole class; calls one group “sick and twisted” jokes about it, all laugh at progression of thoughts
tchr jokes about one group’s work
Line 49: tchr tells anecdote of recurring stress dream about teaching he has every year
Line 62: Uses memes, cartoons on slides- relate to students
Lines 84-85: Student has question relating Freud to novel read in English last year, tchr continues to interact, joke with students

Whitney

Line 13-14: first laugh at me and the computer and

1. a lot of RCLED students I find the ones that have success with the ones I have personal bonds and relationships the ones that I’ll see in the hallways and will try to say hi to everybody but there are some that just don’t want it or we don't mesh in some way and I try to work on that the whole time

2. and so the emotional component is not there and I think that’s paramount with all students, but especially for students who are minority in a majority school where where they need to feel like they should be there and I would want to make sure that it was a comfortable transition instead of a, “you will sign up for this course”

3. I would want to emulate those [teachers] who really, really reached out to me.

4. I like interacting with people.

5. and I can have a conversation especially and get them there or help them

1. remember wanting to be teacher from high
my numbering, I finally won on page 2
Line 16-17: In group “totally working together” do 1-5 then stop, I’ll come around and help if you need it.
Line 27-29: Teacher goes to another group having trouble figuring out problem, tchr says “It's a trick question” then moves on.
Students All groups talking together, teacher continues to visit groups, help, explain
Line 60-62: Teacher taking attendance, asks a student about another student who is absent, “Is he sick? He must be, he’s been out”
Students call teacher by her first name, “we have a question”
Line 65-66: Student enters late, approaches teacher, teacher tells him “You might feel a little lost, but we’ll get you caught up”
Line 97: Students take out homework, tchr: “what do we want to take about?”
Line 135-136: In hall way, teacher hold up loop made of yard sticks, student throw paper balls through hoop (teacher closes eyes, smiling as some paper balls hit her)
school onward and I was a camp counselor from when I was in junior high school all the way thru college I was always just hooked on the idea of teaching
2. we’re teaching and we see you struggling, why don’t you come in and get some extra help? why don’t you come at lunch? you know you and this person had lunch together, why don’t you guys get together a couple times a week? I can stay after school this week. So I don’t think we have any one special thing I think we approach people as individuals.
3. I most definitely try, especially in the first quarter, I always assign the partners & I always mix them up so that everybody in the classroom learns who everybody in the classroom is. That way I can sorta get a feel for who works well with who & who doesn't work well with who
4. so I guess the biggest thing I do is, is let them find their comfort zone.
Table 4 shows how I aligned observation data and interview data from each participant to the CRIOP Pillar that the data represented. In the case where a particular piece of data was indicative of more than one CRIOP Pillar, the data was included for each pillar. Likewise, when a piece of data fell outside the a priori categories of the CRIOP, I created a new table to house these pieces of data for further analysis and comparison to determine themes additional to the CRIOP themes. This typological analysis (Hatch, 2002) is appropriate for my study because I started with predetermined codes based on the CRIOP tool; hence, I was able to connect interview data to observation data and identify patterns and themes within the elements of CRP used as the basis for the CRIOP and discussed during the interviews.

Data analysis was on-going during the course of the data collection process, but primarily took place after all data was collected. I continued to write memos throughout the data analysis process. At this stage, memo writing focused on emerging themes and patterns in the data (Johnson & Christensen, 2000). This memo-writing helped me to note emerging themes and patterns, such as the fact that several teachers brought up other members of the school staff as being important to the overall academic success of the AP RCLED students in their classes. I also used memos to focus on questions that were emerging in my mind as a result of my analysis of the data. For example, during my observations I noticed that several teachers were using cold-calling as an instructional technique. This surprised me initially, as this technique is typically viewed as culturally non-responsive. My memos about this issue asked questions like, “Are all the teachers
doing this? Frequently? What’s going on here? What makes this technique work here when it’s not really viewed as culturally responsive to cold-call students?” This recursive data collection, analysis, and reflection process allowed me to maintain an on-going “dialogue” with the data so that my overall examination of the teacher participants’ beliefs about AP RCLED students and their pedagogy in the classroom would be authentic, full and robust.

Once interview and observation data collection was complete, all interviews had been transcribed, coded, and analyzed for themes, and observation data (including field notes and CRIOP scores) had been analyzed, I used the data matrix to examine how the data responded to my research questions. In organizing the data, a natural pattern emerged based on the CRIOP Pillars and those themes that emerged in the data that fell outside of the CRIOP Pillars. Areas in which the observations were scored highly on the CRIOP tool naturally had more frequent and detailed examples, both in the observation field notes and in the interview transcripts. For example, the incidences of examples of Pillar I: Classroom Relationships, both in the interview transcripts and in the observation field notes, was extensive. These examples occurred in the data far more than did examples of any other CRIOP Pillar. Teachers’ scores on this pillar using the CRIOP tool were also significantly higher than were scores on other pillars. This fact, combined with the frequency with which teachers discussed and exhibited evidence of Pillar I: Classroom Relationships, indicated its significance in response to my Research Questions 2 and 3: What are these teachers’ beliefs about teaching Advanced Placement RCLED students; and, in what ways do AP teachers who are successful with AP RCLED students
exhibit aspects of culturally responsive pedagogy in their practice? I continued to analyze and organize data in this way in response to Research Questions 2 and 3, especially; that is, the higher the CRIOP score and more frequent the incidence of examples in the interview transcripts and field notes, the more significant this factor was in response to the questions. Using this approach led me to conceptualize a continuum of importance of the factors on the CRIOP for AP RCLED students, as discussed in Chapter Four and seen in Figure 1.

Meanwhile, I also focused on patterns that emerged that fell outside of the a priori framework of that CRIOP, such as other staff members’ role and factors intrinsic to the students. After listing the factors separately, I noticed that they could be divided into two main areas: student factors and school factors. Using these two headings, I identified examples, primarily from the interview data, that corresponded to the two areas. Once I had identified these examples, I tried to determine if there were any further patterns within this data. From this analysis, I determined that there were themes within the two headings, so I further coded the data according to these themes. I knew the themes were there, but it was difficult at first to state the themes in a way that was really representative of what I thought I was seeing in the data. After much reading and re-reading of the data, I determined that student factors included emotional efficacy, knowledge of the cultural capital of Advanced Placement, and willingness to strive, while school factors included formal support and time. At this time, I also engaged in extensive memo writing about how these factors seemed to be linked in the data, and how I would represent that in the findings chapter of my writing. Memos took the form of informal journal-style writing
and sometimes simply recording a voice memo of the thoughts and questions swimming around in my head for later consideration.

Data analysis took many months, and was interrupted at times by significant events in my personal life, including the birth of my daughter. Although I stepped away from the data at times, it was ultimately helpful, as returning to the data with fresh eyes and a fresh perspective often allowed me to see the data in new ways and ask new questions of the data. It also necessitated frequent and repeated re-reading of the data, bringing about a deeper and more detailed analysis in the end.

**Limitations**

This study had several limitations. First, there was the possibility of researcher bias. Second, the use of the CRIOP tool presented several limitations, both expected and unexpected. Another possible limitation was the risk of socially desirable responses during the interview. Finally, there was a risk of reactivity during my classroom observations of the teacher-participants.

**Researcher bias.** Although Creswell (2008) stated that qualitative researchers tend to avoid the use of the word, “bias,” since “all research is interpretive” (p. 266), I believe it of the utmost importance in this study to examine carefully my own preconceptions and personal experiences which may influence my interpretation of the data. Since it would be impossible to eliminate my preconceptions and prior history as a teacher and a member of the teaching community in which I conducted my research, it was important for me to examine these possible biases regularly in order to avoid having them affect my interpretation of the data (Maxwell, 2005). I did this through the writing
of what Maxwell (2005) terms “memos.” Maxwell (2005) encouraged qualitative researchers to write memos regularly throughout the research process in order to “facilitate reflection and analytic insight” (p. 12). For me, memo writing took the form of informal, stream-of-consciousness writing where I “verbalized” my internal dialogue, questions, thoughts for exploration, and ideas related to my research in whatever stage I was currently. In these memos, I also reflected on what possible biases I might have been bringing to my interpretation of the data and how the data might be viewed differently. Using this writing, I hoped to bring my possible biases to the forefront of my own thinking, examine them, and be able to look at the data with a fresh eye. I also triangulated the data collected in the teacher interviews and the data collected during the two teacher classroom observations to improve the accuracy of my findings.

Additionally, because I knew the study participants prior to conducting this research, there was an added possibility for researcher bias. In order to reduce this possibility, I was careful to avoid making judgments as I conducted the interviews and observations. Rather, I consciously maintained focus on what the teacher actually said and did, rather than imposing any judgment or value prior to analysis with the CRIOP tool as the parameter. In addition, though I knew the participants as colleagues, I had not systematically observed them teach or discussed the ideas specifically addressed in the interview protocol prior to this study. Despite the potential for bias, knowing the teachers and the school also gave me insight into the culture of Advanced Placement, especially as it relates to RCLED students, at the school. Indeed, several teachers referenced this culture during their interviews. Hence I believe the answers and actions of the teacher
participants and my interpretation of them using the CRIOP tool to be valid and authentic.

**The CRIOP observation tool.** A second limitation to this study involved the use of the CRIOP tool as my observation protocol. While I was trained in the CRIOP tool, there were no other individuals locally who were likewise trained and who could therefore provide a check for the validity of the scores I assigned teachers on the CRIOP. I considered several options in order to minimize this limitation. I considered asking a colleague to read my observation notes to see if they would agree with my scoring. I eliminated this option, however, as only those who have been trained by the developers of the CRIOP would be a reliable source to check my scoring. I considered sending my observation notes via email to colleagues who have been trained in the CRIOP. I discarded this possibility, however, as the observation notes alone (without an accompanying video, for example) would not provide sufficient context for making a reliable judgement for scoring. In the end, I accepted this as a limitation to my study.

Another limitation to this study was the fact that I only observed each teacher two times. Although this is an acceptable number of observations as dictated by the CRIOP (Powell et al., 2016), I believe this study would have benefitted from more observations of each teacher. In fact, during the CRIOP training, the researchers who created the tool discussed the fact that this is a limitation to the CRIOP, and suggested that the findings from its use would be more robust the more there are opportunities for observation. I questioned whether some of the CRIOP areas in which teachers scored poorly were more reflective of the limited number of observations rather than a true representation of the
teachers’ practices in these areas. Conducting more observations would have likely offered a broader view of the teacher-participants’ practice and culturally responsive instruction and more robust findings.

A final limitation related to the use of the CRIOP tool for this study is that the tool was originally developed for use with literacy classrooms. While the conceptual framework of CRP is transferable to the AP classroom, there were some indicators on the CRIOP tool itself that did not transfer well. For example, in the Discourse Pillar, one of the indicators that observers should consider is whether the teacher developed language objectives in addition to content objectives. In the AP classroom, there is certainly room for language objectives given the content-specific vocabulary associated with most AP courses. However, another indicator in the Discourse Pillar suggests that culturally responsive teachers should convey specific expectations for vocabulary use in discussions (e.g. using target vocabulary) (Powell et al., 2014). This indicator is an example of one that fits less well in the AP context; although the teacher might target certain content vocabulary, instruction of that vocabulary would likely look very different in an AP class than in a literacy setting. At the same time, there is an emphasis in an AP class on the language of power, English, since that is the language of the assessment, which would also be considered culturally non-responsive in the domain of Discourse. However, given the nature of the curriculum, the specialized vocabulary, and the standardized end-of-course assessments that are dictated by the College Board, these elements of CRP are largely out of the teacher’s control.
In that way, the same could be said of the Assessment Pillar of the CRIOP framework. Many of the indicators of the Assessment Pillar were ill-fitting to the AP context, as well. I could have excluded these areas from consideration, and indeed, were I to use the CRIOP tool again for AP classrooms, perhaps I would do just that, but since this was my first time using of the tool, I felt it was important to use it with fidelity. While the teacher’s scores on the CRIOP are meant to be considered holistically, there were some indicators in some pillars, such as Discourse and Assessment, that simply did not transfer well to what you might expect to see in an AP classroom versus a literacy classroom. For these reasons, the CRIOP tool itself presented some limitations to this study.

**Socially desirable responses.** A third limitation to this study was the risk that the teacher-participants would give socially desirable responses during the interview portion of the study. Given that the participants were aware that I was focusing on the instruction of RCLED students, specifically, they could have been inclined to respond to interview questions with answers that reflect what they “should” say to be culturally responsive, rather than what they actually do in the classroom or believe about teaching AP RCLED students. I included several components in the study design to try to limit the possibility of socially desirable responses. First, at no time did I use the expression “culturally responsive pedagogy” or any similar expression. If I were to use this phrase, the teachers might have been more likely to offer descriptions of CRP as a theory rather than descriptions of their actual teaching. Second, by beginning my relationship with the teacher-participants with the understanding that I viewed them as exemplars of AP
teachers of RCLED students, I expected the teachers to be more at ease with the interview process and more likely to offer a more authentic picture of their teaching. As a high school teacher myself, I know that most high school teachers like to be thought of as exemplary and are excited to share what they do well with others. Third, in the interview protocol, I asked teacher participants to not only describe what they do or believe about teaching AP RCLED students, but also to provide specific, concrete examples of how they do this in the classroom. Thus, the teachers needed to be able to offer support to their ideas, increasing the likelihood of authentic responses. Finally, the interview data was triangulated with the observation data, allowing me the opportunity to see if the teacher participants “talked the talk” and “walked the walk” of CRP.

Reactivity. In the same vein as the risk of socially desirable responses during the interview process, there was a similar risk of reactivity on the part of the teacher during the observation process. Again, because teacher participants became aware during the interview that I was observing their work with RCLED students, especially, they might have been more likely during the observation to behave differently toward these students while I was there than they normally do. Indeed, from my own experience, I believe most teachers behave somewhat differently when there are observers in the classroom in an effort to best impress the observer, to show the observer their best teacher selves. To an extent, therefore, reactivity is not something I could control. However, again I included several elements in the research design intended to limit this risk. First, I observed each teacher two times. Having the second observation improved the reliability of my observations using the CRIOP tool and gave me a fuller picture of the teachers’ authentic
classroom behaviors. Building a relationship with the teachers through the interview prior to classroom observations coupled with multiple observations also improved the teachers’ comfort with having me there in the classroom, reducing the risk of reactivity. Finally, triangulating the observation and interview data allowed me to compare teachers’ actions with their thinking about their actions. Though this process could not eliminate the possibility of reactivity during the observations, it allowed me to see how the teachers’ observable actions compared with their stated beliefs and identify similarities and discrepancies that might have been the result of reactivity or socially desirable responding so that these possibilities could be reported in my findings.

**Importance**

This study is significant because, if we are to close the Excellence Gap for diverse students in Advanced Placement classes, it is important to know what successful teachers are doing. If success on the AP exam were merely a result of the AP curriculum being delivered with fidelity in all classrooms, the AP Excellence Gap would not exist. Learning, however, and success on measures of learning such as the AP exam, is more than simply delivering, or in the case of the student, receiving the curriculum (Powell & Rightmyer, 2011). In fact, “the way we [educators] view students and their families makes a huge difference in students’ learning, for our pedagogical practices largely emerge” from these beliefs (Powell & Rightmyer, 2011, p. 2). By learning from AP teachers of successful AP RCLED students, we can better understand the dispositions and practices that foster AP RCLED students’ success. These are then the dispositions and pedagogical practices that we can look for in new AP teachers and cultivate in
professional development for AP teachers of RCLED students. In Chapter Four, I will report on the findings of my study, followed by a discussion and analysis of my findings in Chapter Five.
Chapter Four

In this dissertation, I seek to describe the characteristics and culturally responsive pedagogy of Advanced Placement (AP) teachers of racially, culturally, linguistically, and/or ethnically diverse (RCLED) students who have been successful on the end-of-course AP exam. Through observations and interviews, I have endeavored to understand more about the teachers who have led AP RCLED students to success, and who therefore are considered exemplary teachers of AP RCLED students. The research questions driving this study were:

1. What are the educational and professional development experiences of teachers of AP courses who have shown consistent success with Advanced Placement racially, culturally, linguistically, and ethnically diverse (RCLED) students? (“Success” = a score of 3+ on AP exam)

2. What are these teachers’ beliefs about teaching Advanced Placement RCLED students?

3. In what ways do AP teachers who are successful with AP RCLED students exhibit aspects of culturally responsive pedagogy in their practice?

This study is significant because it offers insight into how schools can recruit and develop AP teachers who are effective with students of diverse backgrounds. RCLED students have been historically underserved in programs for advanced learners (de Wet &
Gubbins, 2011, Moore & Slate, 2008; Peters & Engerrand, 2016; Whiting & Ford, 2009), including programs such as the Advanced Placement program (College Board, 2014). While the College Board and school systems that implement the Advanced Placement program are seeking ways to increase educational opportunity for RCLED students in the AP program, and with some success, (College Board, 2014), it is crucial for researchers to identify factors that lead to RCLED students’ success once they are included in such programs. It is by identifying such factors, as I seek to do with this study, that schools can work towards eliminating excellence gaps (Plucker et al., 2010), achievement gaps at advanced levels within public education.

As noted in Chapter Three, I collected two types of data in order to study the posed research questions. I conducted classroom observations using the Culturally Responsive Instruction Observation Protocol (CRIOP) (Powell et al., 2014). I also conducted semi-structured interviews with each teacher participant. After deductive and inductive thematic analysis, the data collected in this dissertation can be divided into two areas: 1.) Understanding AP teachers of RCLED students through the lens of the pillars of the Culturally Responsive Instruction Observation Protocol (CRIOP) (Powell et al., 2014), and 2.) AP teachers’ perceptions of foundations and facilitators for AP success. The first area looks at the data through the a priori framework of the CRIOP. The second area brings in ideas from interview data that fell outside of the CRIOP framework and yet were recurring in teachers’ responses.
The first lens I used to understand the data was through the six pillars identified in the CRIOP tool used for teacher observations. The six pillars of the CRIOP are: I. Classroom Relationships; II. Family Collaboration; III. Assessment Practices; IV. Instructional Practices; V. Discourse; and VI. Sociopolitical Consciousness (Powell et al., 2014). According to the authors, the CRIOP was developed as “a tool to guide and assess teachers’ growth in implementing culturally responsive practices” (Powell & Rightmyer, 2011, p. 5). For this study, I observed each participant as they taught their AP class for between forty-five and seventy-five minutes each on two separate occasions. During the observations, I took field notes every five minutes, as dictated by the CRIOP. After each observation, I carefully reviewed the field notes to identify examples (and non-examples when appropriate) of the six pillars in my field notes, broken down by various indicators for each pillar. I coded the field notes according to the CRIOP Pillars. At the same time, I allowed for the emergence of non-CRIOP themes in the data analysis.

For example, when observing Matt for the second time, I took the following field notes:

1 [Teacher] Calls on student to remember Erikson’s stages, student can’t remember, teacher prompts, student can’t remember, tchr [teacher] says need help? Another student offers idea
2 As students take notes, tchr explains, reminds students they will come back to information, just to get it down
3 Cold calls student again to relate to Erikson stages, student stumbles, tchr leads with examples until student comes to correct answer
During coding, I reread the field notes multiple times, highlighting examples (and non-examples, if found) of each CRIOP Pillar in a different color. I also made notes in the margins when I had questions or ideas about observations that fell outside the CRIOP Pillars. For example, in the field notes above, in line 1, I highlighted “[Teacher] calls on student to remember Erickson’s stages” in both purple, corresponding to CRIOP Pillar IV: Instructional Practices, and green, corresponding to CRIOP Pillar III: Assessment Practices. This note was evidence of the teacher building on prior student learning, an indicator in CRIOP Pillar IV: Instructional Practices. The teacher was also linking this prior learning of Erikson’s stages of development to the current learning about Freud. This is another indicator of CRIOP Pillar IV: Instructional Practices. At the same time, this observation field note was an example of the teacher using formative assessment practices to assess student understanding, an indicator of CRIOP Pillar III: Assessment Practices. Because I had read the field notes of each observation so many times, I began to realize that many teachers in the study used similar in-the-moment formative assessment techniques. Hence, reading this example of Matt using formative assessment caused me to make a note to myself in the margin to consider whether the frequent use of
on-the-spot formative assessment practices was a trend throughout the observation notes of all the participants. This was something I would go back to consider later on.

Likewise, in this example of my observation field notes for Matt, there were several instances where he prompted and guided a student to arrive at the correct answer and allowed other students in the class to help if the student was having difficulty (see lines 2-3, 7, and 9-10). During coding, I highlighted these examples with both purple, corresponding to CRIOP Pillar IV: Instructional Practices, and blue, corresponding to CRIOP Pillar V: Discourse. These observation field notes were evidence of the teacher engaging in culturally responsive instructional practices because he engaged the students in scaffolded learning opportunities that respected individual students’ abilities (Dingle Swanson & Nagy, 2014; Ladson-Billings, 2009; Powell & Rightmyer, 2011). At the same time, these field notes showed that Matt engaged in effective discourse practices corresponding to CRIOP Pillar V: Discourse (Powell et al., 2014). He used a variety of discourse methods to enhance student participation, and students were able to collaborate, or “help,” one another to reach the teacher’s objective. Matt was equitable in his discourse pattern by calling on various students (as opposed to allowing a few students to call out and dominate student discourse in the class), but he also scaffolded for them when they had trouble by asking leading questions to jog their memories of previous learning.

In this way, I read, reread again and again, and highlighted the observation field notes multiple times for each participant. Using the CRIOP tool, I made note of instances and line numbers where examples (and non-examples) of each CRIOP Pillar appeared in
the field notes. After this extensive review of the observation data, the participants were assigned a holistic score for each pillar.

Possible scores on the CRIOP range from one to four based on how frequently the CRIOP indicators were observed. Scores are as follows: 4- To a great extent; 3- Often; 2- Occasionally; 1- Not at all. Table 5 shows the overall CRIOP scores for each participant and each observation, broken down by pillar, as well as the average score on each pillar for all participants.
Table 5

*Culturally Responsive Instruction Observation Protocol (CRIOP) Scores*

<table>
<thead>
<tr>
<th>CRIOP Pillar</th>
<th>I. CLASS</th>
<th>II. FAM</th>
<th>III. ASMT</th>
<th>IV. INSTR</th>
<th>V. DISC</th>
<th>VI. SOCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher/observation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Matt/obs. 1</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Matt/obs. 2</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Whitney/obs. 1</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Whitney/obs. 2</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
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<td>Cara/obs. 1</td>
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<tr>
<td>Tiffani/obs. 1</td>
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<td>Tiffani/obs.2</td>
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<td>Brian/obs. 1</td>
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<td>3</td>
<td>3</td>
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<td>AVERAGE</td>
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As seen in Table 5, teachers scored the highest on Pillar I: Classroom Relationships. The pillar where teachers scored the second highest was Pillar IV: Instructional Practices, followed by Pillar III: Assessment Practices and Pillar V: Discourse. Teachers scored relatively low on Pillar VI: Sociopolitical Consciousness and Pillar II: Family Collaboration. Using these scores, I conceptualized a continuum of
culturally responsive pedagogy for AP teachers of successful RCLED students in this study using their scores on the CRIOP, as seen in Figure 1. Practices that teachers scored highly on, such as Classroom Relationships, are listed at the top of the continuum, with other elements of CRP listed in descending order based on teachers’ scores using the CRIOP.

**Figure 1**: Continuum of culturally responsive pedagogy for AP teachers of RCLED students using scores for CRIOP Pillars.

In addition to the classroom observations, I conducted interviews with each of the five teacher participants in order to extend my understanding of their experiences and thoughts related to teaching AP RCLED students. Teachers’ interview responses added depth and detail to what I observed in their classrooms with regard to the CRIOP Pillars. One section of the interview, Family Collaboration, came directly from the CRIOP. The remaining interview questions were modeled after the interview protocol used by Ladson-Billings (2009). These questions did not directly refer to the CRIOP Pillars, yet many of the teacher participants’ responses in the interviews reflected themes correlating to the CRIOP Pillars. In the following discussion of the data in this study, interview data
is included in the description of teachers when the participants spoke about themes relating to the various CRIOP Pillars in order to reinforce and add depth to the descriptions of AP teachers’ culturally responsive instruction. Hence, what follows is a discussion of my study data through the lens of the CRIOP Pillars in the order of significance for AP RCLED teachers as observed in this study, followed by a discussion of recurring data that fell outside of the CRIOP Pillars.

**Classroom relationships.** As discussed in Chapter Two, student-teacher relationships play an important role in students’ achievement, motivation, and academic engagement (Cornelius-White, 2007; Martin & Dowson, 2009). The area in which the AP teachers in this study scored the highest was in Pillar I: Classroom Relationships. This pillar is characterized by teachers who create a caring, “family-like” classroom environment, where students are met simultaneously with high expectations and an atmosphere of respect, productivity and care (Powell et al., 2014). Examples of this pillar were observed repeatedly in all of the AP teachers’ classrooms I visited, and were observable in both teachers’ actions and words, as well as in the intangible atmosphere of care and mutual respect that I observed in each teacher’s classroom. Teachers also made reference to this component to CRP quite often in their interview responses, despite the fact that no interview question specifically addressed caring or teacher-student relationships. The data related to CRIOP Pillar I: Classroom Relationships spoke to several areas within this broad concept, including caring for students, knowing students, connecting with students, building a classroom “family,” and creating a physical space that is conducive to building strong, culturally responsive classroom relationships.
Beyond the CRIOP indicators, however, I also observed that many of the teacher participants had a culturally responsive mindset that serves as a foundation for their work with AP RCLED students.

_A culturally responsive mindset._ Before examining the indicators of culturally responsive classroom relationships as defined by the CRIOP, it’s necessary to point out that many of the teachers in this study revealed a culturally responsive mindset (Powell & Rightmyer, 2011) that serves as a foundation for their work with their students. A culturally responsive mindset might be described as an openness to multiculturalism, a curiosity about other cultures and peoples, and an appreciation and respect for diversity in people and ideas, especially as they add richness to the classroom environment. Three of the five teacher-participants in this study, for example, fluently speak a second language, and two have previously taught abroad, Tiffani in Japan and Brian in France, evidence of a culturally responsive mindset.

Several teachers also referenced this mindset in their interview responses. Matt, for example, noted that he grew up in a military family and therefore moved a lot throughout Europe and the United States. These experiences, he said, “made me want to interact with all sorts of different types of people all the time.”

Tiffani likewise revealed her culturally responsive mindset when talking about why she became a teacher. She stated that, prior to becoming a teacher, she was employed by a study abroad program where she “went into schools and presented multicultural presentations about the benefits of study abroad, which is something I highly believe in….,”
Brian echoed this culturally responsive attitude. He mentioned that he tries to read articles about other cultures and places as a means to mediate any negative effects of the mismatch between his own worldview as a White, American male and that of his RCLED students. In another moment, when describing a motivational experience at a Minority Student Achievement Network (MSAN) Conference in Cleveland, Ohio, Brian described hearing from African American students on a conference panel.

This [AP] is truly, how for some of them, truly a big step up, a big challenge. And to hear them say how helpful it was to, to actually be treated differently in a class, meaning the teacher recognized [that] they might actually need some extra support…Equality is not treating everybody the same, I don’t think. Equality is giving some people, some students, different attention. So hearing that … I don’t know, it was just very motivating.

In this quote, Brian described a culturally responsive mindset. The first evidence lies in the fact that he attended this MSAN conference in order to further his own professional development for teaching minority students. He also showed a culturally responsive mindset when he internalized the experiences of the African American students on the speaking panel to recognize that there are differences for some students of diverse backgrounds that must be considered in the effort to offer equity in education, and felt personally motivated as an AP teacher as a result.

Hence, a culturally responsive mindset (Powell & Rightmyer, 2011) is not one of the delineated indicators of culturally responsive classroom relationships as set forth in
the CRIOP framework. However, several of the teachers in this study exhibited and described this mindset. This mindset established the foundation for the classroom relationships the teachers created with their students.

**Caring for students.** As discussed in Chapter Two, caring is one of the fundamental components of CRP (Garza, 2009; Gay, 2010; Hynds et al., 2011; McCollum, 2014; Perez, 2000). Within the framework of Pillar I: Classroom Relationships of the CRIOP, several teachers discussed the concept of caring for students as being important in their work with AP RCLED students. Three teachers even noted the idea of caring for young people as foundational to their decision to become a teacher. When asked about his motivation for becoming a teacher, for example, Matt pointed out that he had models of caring teachers and a person-oriented drive for teaching. “I would want to emulate those [teachers] who really, really reached out to me,” he stated, and, “I like interacting with people.”

Cara likewise described similar motivations for becoming a teacher. “I had excellent teachers,” she said, “and I love young people. I find them to be exciting and to be a part of their lives is a privilege for me.” Tiffani simply stated, “I love kids,” as being a reason that she decided to become a teacher.

The ethic of caring for students also emerged when teachers discussed the students in their AP classes. For example, Matt described an English Learner who was, by traditional measures, struggling in the AP class.

He was actually doing well. He could not see that he was doing well. I was trying to explain the fact that getting a 60% in a college
level class as an EL…is, that is incredible! And I cannot, I not only
don't know what that is like, but my hat’s off to you, and I am so
happy every single time you are here.

In this anecdote, Matt demonstrated empathy, an interest in and respect for this student’s
lived experience, and recognized that “achievement” for one student may look differently
than it does for others, while still maintaining high expectations within that paradigm.

Cara’s ethic of caring for her students also came through in her interview. She
stated that she believes that “every student comes to me with the right to learn. They are
capable of learning and I want them to have a really good experience in my classroom,
both socially…and academically….”

Cara also shared several anecdotes that demonstrated an ethic of care specifically
directed at her RCLED AP world history students. She described her interaction with an
English Learner who had only been out of the ESOL program for one year.

She came in. It was so difficult. She would come, she would weep
when we would go over the requirements for an essay, writing a
DBQ [Document Based Question] essay, and she would be there
crying, and I would say, “It's okay. You're doing exactly what you
need to do. You’re coming in, you’re getting extra help. It’s going to
be fine.” And she did. When she came out she felt like she can’t do
this and I kept telling her she could do it, she will do it and she did
do it, and she came out with an extremely positive experience.
In this example, Cara spoke passionately about how important it was for her to guide her student through an academic obstacle, but also to support the student’s emotions with empathy as she did so, evidence of Cara caring for her student.

**Knowing students.** Another important element of establishing culturally responsive classroom relationships is the teacher wanting to and making an effort to know the students. In noting the RCLED students who had done well on the AP psychology exam the previous year, for example, Matt reflected that,

> When I looked at the responses from past reflections, when I thought back on our experience together, there's an understanding that they knew who I was and that I knew who they were. I think at… most times students don’t get a chance to show them[elves], show others who they are. Especially when they are in a minority circumstance, when they are in a classroom, an RCLED experience.

Likewise, Cara stated in her interview that she tries “very hard to get to know [the students].” When asked about how she facilitates success for her AP RCLED world history students, Cara emphasized, “building personal relationships with them. Reaching out to them, finding out who they are as people…it’s mainly about knowing them as people and recognizing that I value their perspective and encourage it.”

Whitney related the need to know her students (and for them to know each other) to the practical work of teaching. She stated,

> Everybody in the classroom learns who everybody in the classroom is. That way, I can sort of get a feel for who works well with who and who doesn’t work well
with who, too….I know these kids work well together so I can set them up to be healthy, good peer relationships within the classroom.

These responses highlighted positive classroom relationships and a learning environment that stimulates positive, respectful relationships between the teacher and the students as well as among students.

**Connecting with students.** Another construct related to culturally responsive classroom relationships that teachers demonstrated and discussed in this study was the idea of the teacher making a personal connection with students. Several teachers talked about how they connect with students purposefully and consciously in order to create positive relationships that will engender student success. In many cases, the teachers were aware that this is an important indicator of success for RCLED students, especially.

For example, Matt described creating connections with students as being important to the success of his AP psychology RCLED students. He stated, “…so a lot of RCLED students, I find, the ones that [I] have success with, [are] the ones I have personal bonds and relationships [with].”

Later, Matt went on to describe the importance of a personal connection with his RCLED students.

I feel like the students that I have that are in that subgroup [RCLED] that I've known before they came into my class, like they knew it coming in…So there, I would say that the majority of those students I already have a relationship with, already had an existing [relationship]… Those who I’m not connecting with, they
met me on the first day of school and they only know me in this classroom…. I wanted them to be able to have that bond.

When specifically asked about how he facilitates success for the RCLED students in his AP psychology class, Matt stated that he feels the connections he has with students are paramount. He stated, “I try to, you know, set up for success as much as possible…but it…all goes back to whether or not I have a relationship with them.”

Tiffani had similar thoughts about the importance of making personal connections with her AP psychology students.

I was really interested in constantly trying to connect better with my students of minority status regardless of race, culture, linguistics, and…you know, you read the research and you know that when one of the key parts of minority achievement in schools is feeling connected to their teachers in a way that’s positive. And so trying really to make sure that they feel some sort of connection was really a key professional development goal I had.

Matt and Tiffani described their conscious awareness of the importance of making personal connections with their AP RCLED students. Both teachers felt these connections were important to their students’ success and they both actively worked to create these personal connections with their students.

The classroom as a family. Beyond what can be observed in actions and described with words, there is an intangible element to the pillar of classroom relationships as culturally responsive pedagogy that requires attention. Several
researchers have found that establishing a classroom as a community of learners is a key component of CRP that supports RCLED students’ success (Davis et al., 2013; Dingle Swanson & Nagy, 2014; Ladson-Billings, 2009; Wiggan & Watson, 2016). As I observed the participants teaching, the “family-like” atmosphere was apparent from the very beginning in each classroom. Powell and Rightmyer (2011) refer to this type of atmosphere as being indicative of a classroom where culturally responsive instruction is taking place. In his AP psychology class, Matt and his students frequently and freely joked with one another throughout the lesson, but in a productive and respectful way. For example, in an activity used to demonstrate free association as a psychoanalytical tool, students drew pictures of random thoughts given to them by other students, then handed the drawings to a third student to write down what they thought was happening in the drawing. As the students’ thoughts progressed in each step, the class laughed and joked together with Matt. At one stage of the free association activity, a student in one group changed the word “girl” to “gin” in his drawing, causing the teacher to make a joke about what the student was thinking about subconsciously. The atmosphere was jovial, as if the class were a group of friends playing a game together, yet the instructional purpose was made clear when Matt referenced this free association game later in the class as a method a psychoanalyst might use during therapy to examine the patient’s subconscious thinking.

The atmosphere of collegiality and positive classroom relationships was evident in Whitney’s classroom, as well. Whitney freely joked with students when she made a typing error on a handout, “First, laugh at me and the computer and my numbering.” She also shared a humorous personal anecdote about her mother’s “utopian world view”
living in a small town and worrying about Whitney living in an urban area. These types of exchanges exemplify the kinds of personal relationships between teachers and students that are evidence of culturally responsive classrooms. The students in these classes were highly engaged and invested in the learning taking place there. Students responded with enthusiasm to the tone these teachers had set in their classes, one of collegiality and mutual respect.

The physical environment and classroom relationships. Another characteristic of positive relationships within a culturally responsive classroom can be observed through the classroom’s physical arrangement. According to Powell and Rightmyer (2011), a culturally responsive environment reflects the teacher’s commitment to collaboration, appreciation for diversity, and respect. Physically, student desks in Whitney’s classroom were pre-arranged in groups of three during each observation and students were repeatedly encouraged to work together to solve problems. At the same time, Whitney rotated through the groups, working with the students as a teacher and learner. During one observation, for example, Whitney’s AP physics students were working together to solve a set of problems from their text. As she sat with one group, the students questioned her interpretation of the correct answer. Working together, Whitney realized that her answer was incorrect and the group, with Whitney, worked to find the actual answer. A short time later, Whitney moved to work with another group that had also chosen the incorrect answer. Whitney stated, “No, it’s not. I totally thought that, too, but it’s not the right answer. Go back.” Then the two groups seated near each other began discussing the correct response and working through it together. This observation showed how the
learning environment in Whitney’s classroom reflected many of the tenets of the caring relationships of a culturally responsive classroom. The students and teacher worked together productively and collaboratively, and students were viewed as sources of knowledge equally important as the teacher. These behaviors reflect the tenets of culturally responsive pedagogy highlighted in the work of Ladson-Billing (2009) and Gay (2010.) At the same time, the students were engaged in challenging work, higher-level thinking, and interacting in highly productive, respectful, academic conversations, encouraged by the way the classroom was set up to promote these types of interactions.

Physical and interactive examples of positive classroom relationships were observed in Brian’s classroom, as well. During one observation, student desks were arranged in a circle to facilitate conversation and interaction among the students, rather than only between the teacher and students. At the center of the circle, a few students had been charged with taking notes on the circle conversation. When the student note-takers were not sure what to write, the teacher repeatedly prompted the note-takers to ask their peers rather than simply giving them the answer. Like Whitney, Brian also put himself into the role of learner among his students; as opposed to the stereotypical “sage on the stage,” he became the “guide on the side.” As his students offered analysis of a poem, Brian listened attentively, nodding, and said, “I’ve never thought of it that way,” as if to suggest they had given him a new way of looking at the poem. When students came to a provocative passage in the poem, Brian listened silently as they discussed the passage among themselves then gently brought them back to the poem after they had the opportunity to voice their thoughts about this passage, even those that were somewhat off
the mark. Rather than interrupting and dominating the conversation, though, Brian allowed the students to speak and then asked thoughtful guiding questions to refocus the students. Again, these actions are examples of a culturally responsive environment where caring, respectful classroom relationships, both between the teacher and the students and among the students, are emphasized. Once again, the physical set-up of the room as a circle facilitated this atmosphere and dialogue.

Another physical aspect of the classroom environment that promotes culturally responsive relationships has to do with what the teachers choose to display around the room. In culturally responsive classrooms, teachers display images that represent a variety of perspectives and respect for different groups (Powell et al., 2014). With the exception of Whitney’s classroom, which had almost nothing on the walls at all and was filled with primarily science equipment, all of the teachers’ classrooms fit the description of a culturally responsive classroom in terms of the visual content displayed in the room. In Cara’s AP world history classroom, for example, there was a display on ancient India which included a map and drawing of a Hindu man. Nearby, there was a poster of Mayan relics and a hand-drawn portrait of a girl wearing traditional Japanese clothing. In Tiffani’s classroom, there were posters of various TIME magazine covers featuring influential world leaders, including Asian and African leaders. A poster of a portrait of Sigmund Freud hung alongside a poster of Frederick Douglass. A poster of a woman and children in Darfur had the word, “Hope” written in both English and Arabic. In her interview, Tiffani commented that she consciously seeks to display images of diverse people and cultures in her classroom, “so they can see themselves reflected in the
curriculum.” The teachers’ choices of what to display in their classroom reflected the indicators of a culturally responsive classroom.

**Summary.** Researchers note that culturally responsive instruction includes establishing a classroom climate that “promote[s] equity and mutual respect among students… [where] all students feel fairly treated and respected” (Richards, Brown, & Forde, 2007, p. 67). This climate was apparent in each of the classrooms I visited, and I have offered several examples as description. Yet describing the classroom environment in these AP classes leads me to a challenge I have faced in trying to make apparent that which is not always visible. By that I mean that oftentimes, the elements of a caring classroom relationship are things that are not so much seen as they are felt. In observing the participants’ interactions with their students, there were certainly actions that they took that demonstrated an ethic of care for their students. However, there was also an intangible, often non-verbal expression of care that created an atmosphere of care and respect that these teachers had obviously created since the beginning of the year with their students that goes beyond specific actions. One could feel that the teachers cared by the way they made eye contact with students, by the body language they used to actively listen when students were speaking, by the greetings they gave the students as they entered and left, by the side comments about non-classroom related topics that showed these teachers knew their students as people, too, beyond the academics. As I have endeavored to give specific examples of caring classroom relationships, I feel it is important to note this element of what the observer feels in a classroom, as well, and note
that the feeling of care was apparent in the classroom of each of the AP teachers I observed for my study.

Prior research (for example, Davis et al., 2013; Dingle Swanson & Nagy, 2014; Gay, 2010; Ladson-Billings, 2009; Wiggan & Watson, 2016) has indicated that positive relationships between teachers and students and classroom environments that engender respect, caring, and a sense of community lead students to have more positive views of themselves, their academic potential, and attitudes toward school and schoolwork. Building classroom relationships was the area in which the AP teachers in this study were overwhelmingly strong in terms of creating culturally responsive classrooms. There were a multitude of examples from both the classroom observations and the teacher interviews that pointed to the importance these teachers place on creating culturally responsive relationships with the RCLED AP students. These examples may help to explain the success of AP RCLED students in AP classes where the AP teacher consciously and purposefully seeks to establish caring relationships with students.

Instructional practices. In her study of exemplary teachers, Ladson-Billings (2009) found that culturally responsive teachers used “deliberate pedagogical strategies” (p. x) in their instruction of African American students. It is significant, then, that after Classroom Relationships, the AP teachers in this study scored highest on CRIOP Pillar IV: Instructional Practices. This pillar is characterized by culturally responsive instruction that is situated in students’ lives, builds on prior learning, is hands-on and meaningful, is scaffolded, allows for student choice, and develops students’ academic vocabularies (Hynds et al., 2011; Garza, 2009; Ladson-Billings, 2009; Powell et al.,
Indicators of this pillar were primarily seen in the classroom observations, although the teachers discussed their instructional practices during the interviews, as well. The AP teachers in this study tended to exhibit some of these factors more frequently than others, resulting in holistic scores that fell between two, indicating the behaviors were observed occasionally, and three, indicating the behaviors were observed often.

Overall, the AP teachers showed a variety of culturally responsive instructional practices. One of the most frequent practices observed was the teacher allowing the students to make meaning together while the teacher guided and questioned them to move them toward understanding. This practice reflected classrooms where, “Students are engaged in inquiry and the teacher learns with the students” (Powell et al., 2014).

Brian, for example, frequently responded to students’ questions to him by deflecting the question back to the students. “Don’t talk to me,” he said, “talk to each other.” None of the teachers I observed required students to raise their hands to be called on before being allowed to contribute to the discussion. Rather, the teachers had established a practice of meaningful dialogue between students and the teacher and among the students themselves. During one observation, Brian encouraged the students leading the discussion to call on their classmates rather than to direct questions or discussion points at him.

Whitney provided many examples of this pillar in her AP physics teaching. In her interview, Whiney pointed out that she uses a specific instructional practice in order to help her students. She stated,
I use this idea called the learning cycle where, whenever possible, I put them in the lab situation first and I let them physically touch it, build it, see it, experience it before you put any words on the board or any terminology… some kids come in with a lot of hands-on knowledge other kids don't, and that sort of levels the playing ground for them so everybody has seen what we are talking about and now it is easier to put the words in context…with the science.

These instructional practices Whitney described are indicative of culturally responsive classroom instruction because the learning activities encourage hands-on and exploratory learning that builds content vocabulary (Powell et al., 2014). Whitney also recognized and responded to the fact that her students had varying levels of background knowledge and academic vocabulary, further evidence of culturally responsive instruction (Ladson-Billings, 2009).

I also observed Whitney using culturally responsive instruction practices. In one lesson, for example, Whitney had students crumple paper into balls and throw them through a hoop in the hallway. After they did so and retrieved their paper balls, Whitney asked, “Now what could I do [holding the hoop] to make fewer balls go through the hoop?” Students came up with a variety of ideas, all of which Whitney let them try out. After trying a variety of possibilities, Whitney connected the concept of trying to limit the number of paper balls that would pass through the hoop to magnetic field flux. By having students question and practice with the paper balls before introducing the mathematical formula and scientific concepts of magnetic field flux, students were engaged in problem-solving together. At no point did Whitney tell them “the answer” or
what they should be thinking; rather she let them try out many different hypotheses in order to figure out ways to limit the flow of paper balls through the hoop. Only after students had come up with their own ideas did Whitney relate the action to the physics concept she was introducing. She continued to engage the students in discovery learning even after showing them the mathematical formula for magnetic field flux. She walked them through a few problems on the board, and then told them they would be going to the lab for a bit to “figure out why we care.” She had the students work in small groups with a set of materials at their lab stations “to play…to figure out what happens when we mess with the flux.” As students went to explore at their lab stations, Whitney went with them to continue engaging in purposeful questioning as students worked together to discover science concepts. Both Whitney’s actions and language reinforced culturally responsive instructional practices. Students were “encouraged to pose questions and find answers to their questions using a variety of resources” (Powell et al., 2014) and Whitney was engaged in this discovery process alongside her students. This type of hands-on, exploratory, shared meaning-making is indicative of culturally responsive instruction (Garza, 2009; Hynds et al., 2011; Ladson-Billings, 2009).

During another observation, after students worked a set of problems in small groups, Whitney posted “what I think the answers are” on the board. Students compared their answers and continued to discuss within their groups. One group asked Whitney to explain a problem. She then used a think-aloud method to explain the process she used to solve the problem. A student then asked her to explain another problem. She pointed out that it was basically the same type of problem as the previous one. After explaining, she
asked the students, “Is that good? Or do you need me to show more?” One student in the class was still unsure so Whitney showed the solution again using the white board. This interaction showed Whitney using culturally responsive instructional practices as she modeled the problem solution steps using a think-aloud and re-taught the concept when students were still unsure.

Another frequently observed culturally responsive instructional practice involved the teachers scaffolding learning for the students and relating current concepts to those previously learned (Garza, 2009; Ladson-Billings, 2009). Matt very frequently related concepts being discussed in the present AP psychology class to concepts taught earlier in the year. When studying Freud, for example, Matt encouraged his AP psychology students to recall what they had previously learned about Erickson’s stages and Piaget’s stages and relate them to the present learning about Freud. Matt also related new academic vocabulary to concepts previously learned, thereby reinforcing the vocabulary from both the current and prior units.

Tiffani similarly reviewed and summarized prior learning on Piaget, Erikson, and Kohlberg stages of development when discussing Freud. She also provided students with concrete, relatable examples of the Freudian concepts the class was discussing. For example, using a dramatic “teenager” tone, she pretended she was the id telling herself “Go ahead, skip school. It’ll be fine,” and then the superego saying, “You can’t do that! You’re such a slacker! You can’t lie to your teacher like that.” She then gave another example that students were likely to relate to—the conflict between the id and superego when they “find” money on their parents’ dresser. These examples showed Tiffani using
culturally responsive instructional practices as she built on students’ prior knowledge and situated learning in students’ own lived experiences.

Tiffani also discussed in her interview how she scaffolds instruction for her AP RCLED students.

Making notes available online for courses….Students have really said that's very helpful for them…especially linguistically challenged students. They can’t always keep up with the writing and listening because they are processing. They are just trying to process the English, and so making those available so they can go back and read over is very helpful. I’ve also tried to do a lot more visual aids….And I've also had students say they would really like to have those available…because those illustrations are powerful for them…. [I] methodically really lead students through the [writing] process in a very scaffolded way, much more rigorous in terms of getting them to understand the process of rubrics for the AP writing component and it has made a huge difference in their success on the AP exam. I’d say…it was around a 25% jump in passing scores of threes or better.

In these examples, Tiffani listed many of the strategies that she uses to scaffold instruction for her her students. She also noted that she listens to her students’ instructional needs and is responsive to them, pointing out how these instructional practices are beneficial to her students’ success in the AP class.

Throughout my observations, teacher participants in this study demonstrated culturally responsive instructional practices fairly often during their instruction of their AP classes. These teachers commonly scaffolded instruction, built on students’ prior
learning, used hands-on learning experiences, and allowed students to make meaning together. These practices are indicative of culturally responsive pedagogy (Hynds et al., 2011; Garza, 2009; Gay, 2010; Ladson-Billings, 2009; Powell et al., 2014).

**Assessment practices.** Culturally responsive assessment practices are those that measure a student’s potential to learn, as opposed to simply measuring deficits or current knowledge (Powell & Rightmyer, 2011). Teachers in this study scored an average of 2.1 on the CRIOP Pillar III: Assessment Practices. This indicates that teachers exhibited culturally responsive assessment practices occasionally during observation. Teachers who exhibit culturally responsive assessment practices use a variety of formative assessments throughout the learning activity, allowing students to demonstrate learning in numerous ways (Powell et al., 2014). Practices such as “talking partners,” journals, whiteboard responses, and self-assessment are commonplace (Powell et al., 2011).

In the AP classrooms I observed, assessment was more likely to take place at the end of a unit of instruction. Perhaps part of the reason for this type of summative assessment can be attributed to the fact that the AP curriculum requires a high-stakes end-of-course exam. As Matt pointed out, for example,

> The main thing about an AP course is, it’s content. It's not about the growth, it's not about, you know, do you generally get the concept? It's a thousand people, terms, experiments; you have to know them all forwards, backwards, by definition…. If they don't know it, [they] can't flub it. You can't just read it and kind of figure out what the answer is. You actually have to know.

In this interview response, Matt alluded to several assessment practices that would be
indicative of a non-culturally responsive classroom according to the CRIOP: tests are written and require proficiency in English; assessment is used to determine what students have mastered; students must know “the” answer; and assessment is multiple choice or matching (Powell et al., 2014). However, as Matt discussed these assessment practices, he clearly situated them in the context of what is expected on the AP exam, a factor which clearly drives the assessment practices used in class throughout the year.

However, there were incidences when the teacher participants exhibited culturally responsive assessment practices. The most common were frequent teacher “checking for understanding” and teachers as careful observers of students’ understanding (Hynds et al., 2011; Powell & Rightmyer, 2011). Many of the teachers observed in this study frequently checked in with students while they were working on a task. This was done as a whole class, in small groups, and one-to-one. When her AP physics students were working through problems in small groups, for example, Whitney was constantly moving from group to group, checking progress, asking probing questions, and informally assessing students’ understanding of the problem.

One observation related to assessment that I found note-worthy was that many of the teachers in this study engaged in “cold-calling” students, a practice that would commonly be discouraged in culturally responsive pedagogy (Powell et al., 2014). In a culturally non-responsive classroom, “the main form of classroom discourse is Initiate-Respond-Evaluate (IRE) where the teacher poses a question and individual students respond” and where “the teacher controls classroom discourse by assigning speaking rights to students” (Powell et al., 2014). However, while the teachers in this study
engaged in this practice, they did have several culturally responsive strategies associated with this form of checking-for-understanding assessment. For example, as Matt pointed out, he cold calls students to see where they are, but there is no penalty for not knowing the answer. He stated in his interview that, “I do not allow them say, ‘I don’t know.’ They can say, ‘I don’t know, comma, yet,’ and then we build up from there.” This was observed in his classroom, as well. There was a pervasive expectation that he might call on any student at any time. On one occasion, he asked a student a question, the student did not know, but Matt used focused questioning to guide the student through what he did know to arrive at the answer.

In Brian’s AP English class, students again were expected to be accountable at all times. Like Matt, if a student didn’t know the answer (or wasn’t paying attention to the question), there were no negative repercussions. Rather, Brian rephrased the question, restated it, or provided leading questions to help the student get to the concept. Even when, “I don’t know” was the immediate answer, students in Brian’s class weren’t allowed to give up or dodge the question. Instead, Brian used it as an opportunity to guide the student to the understanding thus demonstrating the culturally responsive practices of expecting all students to participate and holding all students to high expectations (Garza, 2009; Gay, 2010; McCollum, 2014).

In relation to assessment practices, the teachers in this study were observed using culturally responsive practices only occasionally. The overall score on this pillar, however, may be mediated by the fact that the AP course is based on a high-stakes, end-of-course exam, which in and of itself would be considered culturally non-responsive
There were a few significant findings, however, despite this relatively low score on the CRIOP. Among these was the frequent use of cold-calling, a practice counter-intuitive to culturally responsive pedagogy and yet used effectively by the AP teachers in this study to both informally assess and instruct.

**Discourse.** According to Gay (2010), culturally responsive pedagogy is rooted in the belief that cultural diversity is a strength and a useful resource for improving the achievement of diverse learners. Included in this diversity are the varying discourse patterns RCLED students bring with them into the classroom. For example, English learners bring the knowledge of their native languages. In a culturally non-responsive classroom, English learners would be discouraged from using their native languages, while in a culturally responsive classroom, students would be encouraged to use their native languages (Powell et al., 2014). Furthermore, students of diverse cultures may be used to varying discourse patterns such as call and response or overlapping discourse that are not typical of the majority culture (Ladson-Billings, 2009; Powell & Rightmyer, 2011; Wiggan & Watson, 2016).

Teachers observed in this study scored relatively poorly on the CRIOP Pillar V: Discourse. The average score for teachers for this pillar was 2.1, indicating that indicators of the pillar were observed occasionally. According to the CRIOP protocol, this pillar is characterized by teachers’ acceptance of students’ home language or discourse style in the classroom as well as offering specific opportunities to engage in the home language or discourse in the classroom (Powell & Rightmyer, 2011; Powell et al., 2014). In addition, culturally responsive teachers use a variety of discourse patterns to encourage
student participation and overtly encourage students in developing linguistic competence (Powell & Rightmyer, 2011; Powell et al., 2014). Finally, culturally responsive teachers encourage collaborative, academic discourse, listen actively, and offer authentic responses to student discourse (Powell & Rightmyer, 2011; Powell et al., 2014).

Despite the overall low score for teachers in this study in the area of discourse, there were several clear examples of this pillar of culturally responsive instruction during the classroom observations. Brian, for example, frequently pointed out academic vocabulary and literary terms as the students discussed the text. He demonstrated active and focused listening, making eye contact, nodding, and restating students’ statements as a signal of careful listening. He questioned students about the literary devices used, reinforcing both prior knowledge and academic vocabulary.

Several of the teachers allowed for overlapping discourse, as well. In both Whitney and Brian’s AP classes, for example, students were observed discussing a problem or concept in pairs or small groups while the teacher was still explaining it to the whole class. Neither teacher stopped and corrected the students for talking as one might expect; rather, the assumption was that they were working together to clarify understanding quickly, and in each case the students returned their attention to the teacher after a brief discussion with a classmate.

Despite the fact that discourse patterns in the observed classes were not frequently representative of culturally responsive pedagogy, the teachers were often cognizant of the importance of discourse in their classrooms during the interview. Matt, for example,
discussed the importance of establishing the expectations for discourse in his AP psychology class.

They want to talk about stuff and I think that’s important. They want to have a voice in the class. On the first day of school, I have them talking, they all have to talk to me…and then we have a little thing about building the expectation that you will say things to me and I will say things to you, on the first day of school.

Positive things …. not to sound negative, but that we are going to have some interaction is important. I am not going to stand up at the top the whole time. I am going to expect you to give me some input on something like that, and that way when I call on you, we can [interact].

In this example, Matt related the importance of discourse in his classroom to the expectation that all students will engage with him in this discourse throughout the year.

During my observations, there were no occasions where the students in teacher participants’ classrooms were encouraged to either engage in their home language or in a non-standard discourse pattern. Likewise, I did not observe any teacher overtly directing students in specific language objectives (e.g. writing in complete sentences or utilizing a specific vocabulary set within their responses). These indicators of culturally responsive discourse as outlined in the CRIOP framework were missing from the classrooms I observed.

However, two teachers discussed their own use of language in their AP classes as related to their RCLED students. Whitney discussed a professional development course she had taken (Sheltered Instruction Observation Protocol, or SIOP) (Echevarria et al.,
2014), designed to help teachers support English learners, where she learned, “not even on how much technical language we have, but everyday language, and how difficult some everyday language can be, especially things like idioms and things like that. So I really try to remove those from my [speech] when I am talking.”

Likewise, Matt noted that he was cognizant of language when speaking to his RCLED students.

I am straight forward with my language…. The economy of language is super important, and there's a lot of people that, I feel, that [students] interact with, that kind of talk around and issue instead of going straight to it. Now when you go straight to an issue, obviously it works better if you have a relationship with the student, because if you go straight to the issue and you don’t have a relationship with the student then it becomes aggressive. But… I find, that with RCLED boys more than anything else, they need to be told straight to their face and…if I just say, “What's up? What are you doing? Why isn’t this done?” instead of, “Well, you know, I feel like lately …” You know, I am not going to mess around. We just, we are going to get straight to the point, and I get [the work] next time and it's done… It doesn't extend some sort of “what if” scenario it's…more understood in respect to their lives than anything else.…

Here, Matt referenced the importance of establishing strong relationships with his AP RCLED students in relationship to discourse. However, this interview example also showed how Matt was aware of discourse patterns and how they may need to differ when he is interacting with his RCLED students in order to bring about success for these
students.

While teachers scored lower in comparison on the CRIOP Pillar of Discourse, they were observed using academic language purposefully in their AP classes and allowing for overlapping discourse, a non-traditional classroom discourse pattern. Moreover, teachers reported being aware of the importance of discourse in their classrooms. They specifically reflected on how their own discourse patterns might be an obstacle for some RCLED students, and how they consciously worked to adjust their discourse in order to be more culturally responsive in these situations.

**Sociopolitical consciousness.** Hollins (1982) pointed out that traditional content and instruction do not always resonate with students of color. This tenet is reflected in the CRIOP Pillar of Sociopolitical Consciousness. This pillar is characterized by classrooms where students are encouraged to examine issues that are important to them, their families, and their community, and are given opportunities to take action on these issues (Ladson-Billings, 2006; Powell & Rightmyer, 2011). In the culturally responsive classroom, students are encouraged to question the status quo, take on real-world issues, and deconstruct biases and stereotypes in instructional materials (Powell & Rightmyer, 2011). The overall average score on this CRIOP Pillar for teachers in this study was 1.7, indicating that indicators of this pillar were observed only occasionally.

Despite the comparatively low score on the CRIOP Pillar of Sociopolitical Consciousness, however, there were pointed incidences when the teacher used an instructional moment to identify biases and stereotypes in the AP curricula. For example, when discussing students’ results on the Myers-Briggs Type Indicator (MBTI)
personality test, Tiffani pointed out that the MBTI is culturally responsive. She noted to students that many older personality type tests were Western-based and therefore biased. By pointing out the potential for cultural bias in psychological testing, Tiffani demonstrated sociopolitical consciousness in her teaching.

Similarly, in his AP psychology class, Matt took an instructional opportunity to point out possible bias or stereotypes in the curriculum. When discussing the theories of Sigmund Freud, for example, Matt pointed out the biases and stereotypes for which Freud is often criticized, but noted that, “We study Freud for the same reason we study Henry Ford; his ideas are not necessarily believed today but are the basis of psychology and the study of psychology.” In discussing Freud, Tiffani also pointed out the potential bias in his “male-focused, heterosexist” theories, telling the students, “You can decide if you agree with that or not.” Hence, the AP psychology curriculum, designed by the College Board as opposed the individual teacher, requires the inclusion of certain concepts that may be laden with cultural or gender bias. However, teachers such as Matt and Tiffani demonstrated sociopolitical consciousness when teaching these concepts by pointing out potential bias and drawing students to consider why they must be aware that such bias exists, question it, and reflect on why it is important to examine even biased curricula.

Several teachers reflected on the importance of sociopolitical consciousness in their interviews, despite limited evidence of this pillar during my observations. In discussing her philosophy of teaching, for example, Tiffani stated,

The teacher’s job is to empower students to think for themselves and that’s our first priority is to give them enough knowledge and background that they can
begin the process of questioning information, content in an intellectually strong way and approach their own assumptions with a critical sense of self and a critical sense of learning. That they are not just taking for granted any information given to them but rather [thinking] more deeply about everything around them.

Later in her interview, Tiffani noted that she believes her AP RCLED students benefit from

See[ing] themselves in the curriculum, infused in the curriculum …. They are able to see some level of their own personal experiences gathered in some of the material we learn at some point throughout the year…. And maybe that comes as a surprise sometimes…. Whereas the white students sort of … it’s kind of a given with the way that American history can be taught from the dead white guy perspective instead of the multicultural perspective…. And I think…having that ability to see themselves infused in curriculum is always a healthy way to learn.

Matt also referenced in his interview that he would prefer to talk about current events in the context of his AP psychology class, and often does so, although I did not observe this during my visits to his classroom. He stated,

Obviously I can see a direct link towards to who [students] are as people and I try bring that back. That’s our closing most days, most units …What does this have to do with you?- type deal. And it's very simple for for me to do that because the whole point of psychology is about them in their mind and so I don't I don't shy away from discussing race and ethnicity. I don’t shy away from discussing stereotype and stereotype threats and how we interact with each other and the
words that are said. And I also don’t shy away from taking current events, especially what you had recently, with Michael Brown and with Crawford and especially looking at the two police officers who were shot, in looking at the world at large, and taking that and putting it into the context of the class, and then saying that the ripple effect…that it does start with you and everything you do, what you do say actually matters…. It's supposed resonate with all students, but I find that it specifically [resonates] with RCLED [students]…. They want to talk about stuff and I think that’s important. They want to have a voice in the class.

Matt also referenced having a strong social justice perspective. When describing his philosophy of teaching, Matt stated that as a history teacher,

I think my philosophy became my strength. Whether it was…not necessarily, like, the specific fact, that “Who had the corncob pipe in this picture?” but was more related to, “What does slavery have to do with you today?” and “How can we, kind of, reflect on our history and talk about future progress and social change?”

Cara also discussed sociopolitical consciousness as it relates to her teaching in her interview.

This whole course is about perspective and recognizing different perspectives, so that's kind of like our starting point…we are always evaluating the reliability of our sources, recognizing that everything is biased. So getting kids to acknowledge that we all have biases, ours are generally a Eurocentric point of view and we have to be aware of that so that we can open ourselves to other equally valid but different points of view. So that that's something that is driven home for every
unit... We actually do a point-to-point comparison, say with Islam. That's the biggest one, obviously, for contemporary society, as well. “Would the Muslim world be dividing up world history in the same way that we do?” And I show them point by point, “No! Why is that?”

Hence, although the AP teacher participants in this study did not frequently exhibit examples of sociopolitical consciousness as defined by the CRIOP framework during my observations, they clearly valued sociopolitical consciousness as an ideal for their classes as reflected in their interview responses. Although no question in the interview protocol specifically referenced this pillar, many of the teachers discussed it as being important to their teaching and to their RCLED students’ experiences and success in their AP classes.

**Family collaboration.** The AP teachers in this study consistently scored the lowest on CRIOP Pillar II: Family Collaboration. This pillar was assessed using the family collaboration interview questions included as part of the CRIOP tool. According to the CRIOP, the interview is necessary because, “Observations alone will not provide adequate information for scoring” (Powell et al., 2014). This pillar is characterized by classroom environments where teachers and parents/caregivers have genuine partnerships, teachers reach out in non-traditional ways to meet parents, and teachers use parents’/caregivers’ expertise in the classroom to support instruction (Powell et al., 2014).

Most of the teacher participants noted that their interaction with parents and caregivers of their students occurs primarily through email and telephone calls. Some
teachers discussed having newsletters periodically throughout the year, but they also noted that this practice is time-consuming and is not always feasible given the many demands for their time. In many cases, teacher participants noted that they felt they could and should do better in the area of family collaboration.

Although AP teachers in this study scored poorly overall on home-school communication, there were nonetheless several noteworthy comments related to family involvement that the teachers made during their interviews. One example is that several teachers mentioned relying on other school employees to establish or improve family communication with their RCLED students. Tiffani, for example, stated that she tries “to form a team communication with the families between myself and the minorities services coordinator, the counselor, if there is a special [education] monitor…making sure that…the student feels multiple levels of support.”

Matt discussed frequently asking the bilingual resource assistant or the Minority Student Achievement Coordinator for the school to step in when parent/caregiver communication is needed, noting, “if I can’t get [the parents], she (the Minority Student Achievement Coordinator) will, because they have known [her] for years. Again, it all goes back to the idea of relationships, not just with the kid but with the parents as well.” Here, Matt pointed back to the importance of Pillar I: Classroom Relationships, and connected it to creative ways to reach out to the families of RCLED students in his AP class.
Similarly, Whitney pointed to gaining important knowledge about her students, even with the challenge of trying to have regular communication with the parents of her AP RCLED students. She stated,

“You know, the biggest thing I learn from parents is if kids are shy or not. I mean that’s the one thing parents always seem to want: she is shy, she won’t approach me for help, this kid. She is worried that she won’t approach you for help. Even that piece of information is helpful, because then I know that I have to be more aggressive with that kid.

Once again, the teacher referenced how communicating with parents helps her to create deeper classroom relationships with the student in order to understand the student better and foster better achievement in the class.

Brian also pointed out that communicating with parents reminds him to continue to establish one-on-one relationships with his RCLED students

“When you are in communication with parents, it's just like a good prod…to yourself to … keep checking in with the students…there [are] simple daily check-ins, just personal one-on-ones, just go up to their desk … “What about this? How is this going?” I think those are hugely helpful. Asking them about their reading. Okay, so like they are supposed to read 100 pages in a week but every day ask them, “How is it going? How far have your read? What do you understand? What don’t you understand?”
In the same way, Cara offered an anecdote about how reaching out to the parents of one of her AP RCLED students helped her understand the students better and allowed her to help him be more successful in class.

A particular student was very anxious. I perceived that on the basis of his behavior in class. He was in a group project. Even before we got to the group project there was, he turned in an assignment that…didn't meet the criteria of the rubric, so I was very concerned…how he misunderstood what it was he was supposed to do. So I contacted the parents and that's when they began to share with me some of his issues. That once they said that he’s got some Asperger-like [traits], I was like, “Oh! Okay, now I understand what I'm seeing.” And that that helped provide a framework for some of the things that I wasn't really understanding. And then they also shared, yes, this was very typical of him not understanding, but then he thought he understood, went with it, and then that's where the huge discrepancy would be discovered, and he would feel bad and it would set up this very unhealthy pattern. And so we were able to catch it in time the next time.

In this anecdote, Cara relayed how contacting the parents allowed her to gain insight into the student to know him better and therefore allowed her to make adjustments that would allow the student to be more successful. Again, this example showed the relationship between family communication and building effective classroom relationships.
Tiffani had a similar experience. She recalled how reaching out to the parents of one of her AP RCLED students gave her insight into why the student was perpetually tardy.

I had a student who showed up late literally every day to class first period. Fifteen minutes late every day. I was just getting frustrated and so I called the parents to find out what was going on. I had a conversation with the student briefly but she didn't give a lot up, she just apologized. And when I called [her parents], I found out that her younger sister was confined to a wheelchair and her mother was a nurse and had, of course, a shift schedule where she had to be there by seven which meant she had to leave the house earlier. And so the older daughter was in charge of getting her sister on the van to the special school that she attended and sometimes the van was late. Of course she can’t leave the house, and then she would miss her bus, and then she had to find another way to school. And so being able to communicate and clarify, because the student was really excited about the curriculum. She was Latina. She was a good student. She would miss announcements about due dates and reminders about work due and handing items in, etc. and then her grades started to suffer because of that. And when we worked it out, she partnered up with another student in the class who she got along with well, and they would catch her up on anything she missed in the first fifteen minutes and we were clear…Communication was essential.

In this anecdote, Tiffani touched on several CRIOP indicators of culturally responsive pedagogy. She communicated effectively with the parents of her student to better
understand the student’s home life challenges that were interfering with her success. Tiffani also demonstrated an ethic of care in not giving up on the student when she was unresponsive to Tiffani’s initial inquiries about the student’s frequent tardiness. Finally, Tiffani demonstrated establishing positive classroom relationships both between herself and the student, but also between the students in the class when she encouraged them to work together to support the student in question.

Hence, the teacher participants in this study did not frequently provide examples of how their parent-family involvement fit the criteria outlined by the CRIOP. However, there were several examples of how these teachers used parent-caregiver communication to enhance their understanding of their RCLED students, relating back to Pillar I: Classroom Relationships. The teachers also discussed ways in which they use other resources in the school, such as the bilingual resource assistant and the Minority Student Achievement Coordinator, to fill in gaps in communication between the teacher and students’ families.

**Reconceptualizing the Hierarchy of Culturally Responsive Pedagogy for Advanced Placement**

Based on the above findings, I reconceptualized Figure 1. Rather than list the pillars of culturally responsive pedagogy as a hierarchy based on teachers’ CRIOP scores, I think it is more reflective of the true significance of these findings to think of these pillars as seen in Figure 2.
In this reconceptualized version of the hierarchy of the CRIOP Pillars, the importance of classroom relationships is made clear. Culturally responsive teacher actions such as instructional and assessment methods, curricular decisions that reveal the teacher’s sociopolitical consciousness, and efforts to form partnerships with families and caregivers are important to AP RCLED students’ success; however, these teacher actions must be rooted in the relationships that teachers form with their students. In this study, AP teachers frequently engaged in culturally responsive teacher actions, but they did so in caring, warm, culturally responsive instructional environments they had created through establishing personal relationships with their students. This finding highlights the
need for AP teachers to use culturally responsive teaching practices, but moreover, this finding emphasizes the magnitude of culturally responsive teacher-student relationships and the caring classroom environments in which these practices occur (Garza, 2009; Gay, 2010; McCollum, 2014; Perez, 2000).

**AP Teachers’ Perceptions of Foundations and Facilitators for AP Success**

As mentioned previously, I analyzed the data for this study using both deductive thematic analysis, using a priori themes from the CRIOP, as well as inductive thematic analysis, where themes emerged organically from the data. Beyond the indicators of culturally responsive teaching as seen through the lens of the CRIOP tool, teachers in this study consistently brought up other factors related to RCLED students’ success in their AP classes during their interviews. These responses pointed to factors that were not related to the teachers’ instruction or classroom behavior, but rather were factors that were either student-based or school-based that, in these teachers’ perceptions, played a part in their AP RCLED students’ success.

**Student factors.** The first area that teacher participants discussed as being important factors in AP RCLED students’ success had to do with characteristics related to the student. Teachers repeatedly brought up similar traits that they believed facilitated success for their AP RCLED students. After analysis, these characteristics were classified as: 1.) emotional efficacy; 2.) knowledge of the cultural capital of Advanced Placement; and 3.) willingness to strive. Teachers in this study believed that these factors played an important role in their AP RCLED students’ success beyond the role or influence of the teacher.
Emotional efficacy. One area that teachers commonly brought up in their interview responses were the emotional components that play a part in AP RCLED students’ success. These components included things like feeling comfortable in the AP environment, perseverance, desire for challenge, internal locus of control, and motivation. Teachers noted that successful AP RCLED students, in their perceptions, are those who are strong in these emotional areas.

Comfort. Several teachers pointed out that they try to give their AP RCLED students a sense of comfort in the class. Whitney, for example, pointed out that when allowing students to self-select their groups in her AP physics class, she noticed that her minority students tend to self-group. She allows that because, “I recognize that as a comfort place for them, but then I sometimes make them go out of their comfort zone and learn from other people as well. So I guess the biggest thing I do is, is let them find their comfort zone.”

Tiffani echoed the importance of AP RCLED students feeling comfortable in the AP environment in order to succeed.

One thing that I try to make sure to say is that I want every student to feel safe in my classroom….and so I try to put out there if there is anything you are concerned about you can email me if you don’t feel comfortable coming to see me. You don't have to be overly personally revealing. Certainly, my door is always open, but you can just say this is something that I am not comfortable doing and I would like a pass to the library and there is no penalty for wanting that, because obviously the Western context of what we teach in those areas is different. And so I want to make
sure that all students of all backgrounds feel a sense of safety and they don't have to agree in belief systems.

She continued,

Just having spoken with a lot of those [RCLED] students, just having gone through the National Board process and looking specifically at differentiation for those kids, you know talking to them, do they feel welcome, do they feel that this course is a welcome place for them, and I think that the word on the street is that psychology is a safe place for you. That it's a place that you aren't pointed out for difference but rather celebrated and that you will get the help that you need, but not in a way that you’re targeted, but rather that you are encouraged.

Tiffani’s statements reflected that she believes that feeling safe and comfortable in the AP environment is a significant classroom dynamic for her AP RCLED students.

Cara brought up this same idea in her interview. She noted,

So with AP I think that the biggest challenge is to make sure that the course is retaining a college-level expectancy of learning, but also making sure that all students feel welcome because it is a public school and high school. I want to make sure that every student, regardless of their skill level when they enter the room, feels that they have the ability to achieve.

Likewise, Matt talked about a feeling of comfort in the AP class as being necessary for RCLED students’ success.

So we had some [RCLED students]…drop the first quarter because they were just so stressed out. They felt pressured and pushed….It's good for some, and I see
some succeed and some fall apart... So the emotional component is not there and I think that’s paramount with all students, but *especially* for students who are minority and in a majority school, where where they need to feel like they should be there, and I would want to make sure that it was a comfortable transition instead of the, “You will sign up for this course.” Because of that, they feel this pressure from outside forces.

Although the feeling of comfort that the teachers referenced is considered a student factor, the teachers also recognized their own role in helping to encourage that feeling for the students and in creating a welcoming environment for RCLED students who may be one of only a few minority students in the entire AP class. The teachers perceived that students who felt welcome and comfortable were more likely to stay in the class and to persevere when the class was difficult.

*Desire and persistence.* Related to the student feeling comfortable in the AP environment, then, were the teachers’ perceptions of how the desire to be in an AP class and the persistence to stick it out when the class became difficult were important student factors to AP RCLED students’ success. Matt gave an example of an RCLED student who was not successful in his AP psychology class:

Those students I find fall apart the most, they did not want to be here. I've have one now that was told, “Stay in for a quarter, stay in a semester.” We were trying to work one quarter at a time and he's just stopped showing up all together... So I think his experience is different because he feels pressured to be here.

In this example, Matt pointed out a student who did not have the intrinsic desire for the
challenge of the AP class. The student went into the class because he was urged to by others. Because he lacked the intrinsic desire, he was not able to persevere in the difficult class.

Other teachers also brought up the idea of perseverance as being important to AP RCLED students’ success. They talked about students who succeed as those who don’t give up just because the class is difficult or intimidating. Tiffani said,

I think that when you walk into the classroom [of] people who don't look like you or sound like you, it's very intimidating, especially at the high school level. So I think a lot of them [RCLED students] felt closed out of the AP system. She continued by talking about how she tries to encourage students to persevere,

They have to be willing to try and encouraging them to dig deeply and not give up because the content’s a little bit harder than they’re used to. If this is the first AP they have taken, making sure that they stay in the game and not just question and think, “Oh, it’s AP, so therefore I can’t do it”… Making sure that they really feel the sense that that accomplishment is reachable for them. And so maintaining that rigor and at the same time not intimidating them with the level of expectation. So scaffolding, right, and making sure they feel a sense of the accomplishment. Once again, teachers in the study pointed out that the desire for the rigor of the AP curriculum and the perseverance to work through the challenges of that curriculum are student factors that influence RCLED students’ success in the AP class. However, the teachers also indicated that they try to encourage and support the students to develop these habits of mind.
Internal locus of control and motivation. A final student-centered emotional factor that teachers commented on as being significant for their AP RCLED students’ success was having an internal locus of control, a sense of personal responsibility, and intrinsic motivation for their academic endeavors. Cara commented that her AP RCLED students tend to be “very motivated, and despite significant challenges.” Brian noted that he feels his AP RCLED students are more likely to have an internal locus of control.

They [AP RCLED students] come in without the expectation to succeed, so their successes are, it seems like they can understand more why they have succeeded and why they haven’t maybe. And if they don’t succeed, they are more they seem more likely to, I don’t know, blame themselves? I don’t mean blame. They are more likely to take responsibility for not having succeeded whereas another student might just think, “Well, I am supposed to do good at this so why aren’t I? The teacher is against me or something.”

Matt also brought up the importance of having an internal sense of responsibility for success in AP.

I think the gap that I see in terms of students being AP ready versus students that are kind of on the cusp is the individual accountability component to it. They are like, “Wow, I actually can't just show up and expect it to happen, or I can't just…not do my work.” You actually have to do it.

Hence, several teachers in this study referenced that successful AP RCLED students tend to be intrinsically motivated and tend to feel a personal sense of control and responsibility for their success in the AP class.
Summary. In sum, the teachers in this study frequently brought up emotional factors as being integral to the success (of lack thereof) of their AP RCLED students. Emotional components of success, according to the teachers, were strengths in areas such as comfort, perseverance, personal accountability, and motivation. Teachers perceived that students who were more efficacious in these emotional areas were also likely to be more successful academically in the AP classroom.

Knowledge of the cultural capital of Advanced Placement. A second area that teacher participants spoke of as an important student factor for AP success had to do with the RCLED students’ knowledge (or lack thereof) of the cultural capital of Advanced Placement before coming into the AP environment. Cultural capital includes “cultural resources that are rewarded in school and among educators, mentors and caretakers in talent domains” (Montoya et al., 2016, p. 136). As noted in Chapter Two, RCLED students and their parents often lack the cultural capital enjoyed by majority students and parents (Ford, 2011; Hallett & Venegas, 2011; Hardesty et al., 2014; Kyburg et al., 2007). Montoya et al. (2016) note that

the notion of the achievement gap is a worthy example of how cultural capital, and the lacking by people of color, manifests in whites as both agency and structure (i.e. right to lobby and disproportionate white teacher population) but also embodied and socialized (i.e. attitudes of entitlement and perceived giftedness). (p. 130)

The cultural capital of Advanced Placement includes understandings such as how Advanced Placement works, why it is important or helpful to take AP classes beyond the
intellectual challenge, how to manage time and the increased work load, and prior
knowledge that an AP teacher might assume the student in his or her AP class would
already have.

Advanced Placement as “the norm.” Taking Advanced Placement courses in high
school, as discussed in Chapter One, offers a variety of benefits for students, including a
boost to the student’s GPA, eligibility for awards and scholarships, and the potential to
earn college credits while in high school (College Board, 2014; Kyburg, Hertberg-Davis,
& Callahan, 2007; Moore & Slate, 2008). As noted previously, the majority of students
at North High School take one or more AP classes during their time at the school. Similar
to national AP statistics (College Board, 2014), however, minority students are
underrepresented in many AP classes at North High School. In spite of this, there is a
concentrated effort at NHS (and indeed in Avanelle County as a whole) to increase the
number of RCLED students in AP courses. Matt commented on the pervasive expectation
of “AP for all” in his interview. He stated, “I think the biggest challenge [to teaching AP
level courses] today is that it's expected that all students will take it no matter what their
ability level is….”

He continued,

I think the White students have an expectation. They understand and it's almost, at
this point, that AP is no longer AP, it’s now just the expectation, and intensified is
if you’re, quote, “Regular” and then the regular is if you’re Special Ed. It’s just
pushed up. It's kind of just tiered up and that’s their expectation….This is where a
little bit of bias comes in. And…it's almost like it's creating some sort of heuristic
or shortcut to understand that if I see a student of color in my [AP] classroom, this is a stretch for them somehow. And I think that can do as much damage as...any other type of privilege-based evidence....

Brian also noted the difficulty RCLED students might have in negotiating the predominantly White culture of the AP class.

I don’t know if they [RCLED students] come in and think all the White kids are part of a big social group that they are not a part of? Which isn’t true. Some of the White kids are isolated and confused and they don’t know what is going on either. … but they all look the same so maybe, you know, so maybe they are part of a club that I am not a part of or something?

Similarly, Cara discussed her AP RCLED students’ perhaps not having the same access to supports, such as study groups, because,

I don't know that the RCLED students have as much support for that, beyond the kids that they are in the class with. I don't know that they are hooked into the same network of kids…. Probably because a lot of them, maybe they weren't in intensified classes in the previous year forming those relationships.

Tiffani likewise noted,

I think a lot of them [RCLED students] felt closed out of the AP system. I also think part of it is also knowledge and, you know, the students who are…newly arrived American students, whose families are not used to the American system, or who never had brothers or sisters or siblings in AP curriculum are intimidated by it initially....
Later in her interview, Tiffani also noted that, “I think that [AP is] still somewhat of a mystery to many people who don't, aren’t familiar with the American school system.”

In these examples, the teachers referenced the discrepancy between the majority and minority students at the school in terms of having the expectation and knowledge to take an Advanced Placement class. RCLED students, the teachers perceived, are less likely to be “hooked into” that AP culture or to feel that they belong in an AP class. As a result, RCLED students may miss the opportunities and advantages of AP simply because they and their families lack that AP cultural capital.

*Academic cultural capital.* Another area of cultural capital that teachers referenced as being missing for many AP RCLED students is the practical and logistical knowledge of how to negotiate an AP class. For example, Brian noted,

There…often times is, not a gap in understanding about text, but there is…a gap between the RCLEDs and their white peers…in understanding like how things are done, like how an essay is written, how you avoid plagiarism. So it takes a lot of basic reviewing like, how do you quote? How to integrate information? How do you avoid plagiarizing?

He went on to state that it is often his RCLED students who struggle with the practical demands of his AP class.

Just the amount of work that seems like as far as having assignments turned in late … I’m sure if I looked my RCLED students more of them would be turning in assignments late. Just the quantity of work I think is difficult.
Cara echoed Brian’s sentiments about the difficulty RCLED students often have negotiating the logistical demands of the AP class.

I’d say the RCLED students probably have to work harder. I think the study strategies are little bit more…there is more of a learning curve of figuring out, “How do I make this work? How do I incorporate these huge, huge ideas in the amount of time given?” And that may be also because there are more demands on them. I did hear a white student say yesterday that she doesn't have to study for her other classes. She does for the AP class, so that is a time management issue.

Some teachers connected this gap to RCLED students having been held to perhaps lower expectations in their classes prior to the AP level. Brian wondered about the impact of prior expectations for his RCLED students.

I think for a lot of them [RCLED students] it’s more difficult … I don’t know why, but they seem like they have not been challenged at the same level…many of them, either at home or in the school classes or whatever.

Matt discussed the difference in expectations in AP as a challenge to students, as well. He noted,

They are not used to needing to know all that information all the time, just maybe for that one test, and then they pass it back. So you'll see kids who get it and they'll come after the first quarter, they'll start to get the flow, and [you’ll] see those who fall apart because they didn't realize that they had to pay attention the unit before, [and] the unit before, [and] the unit before.
Matt went on to note that for his in AP RCLED students, in particular, success often depends on how they act both in and out of the classroom, “the prep versus no prep work and then their varied success….The difference between their success or not on assessments or futures is kind of, what they’re able to do when I’m not there.” He noted that successful students were those who understood that part of AP success is students knowing they need to prepare and do work outside of class, as well. This knowledge can be considered part of the cultural capital of AP.

In these examples, the teachers did not say that the RCLED students lacked academic knowledge. Rather, they lacked the academic cultural capital of AP: the practical knowledge of how to manage time, for example, or how prioritize and organize a heavy work load. This is an important distinction, because the teachers were not saying that their RCLED students were cognitively ill-suited for the demands of the AP class. Instead, they noted that these students lacked a form cultural capital that the white students seemed to have mastered previously.

**Summary.** Hence, one factor teachers referenced frequently as being important to the success of their AP RCLED students was having knowledge of the cultural capital of Advanced Placement. First, they perceived that RCLED students and their families have less knowledge about the benefits and advantages of taking AP classes, and often lack the networks for success enjoyed by many majority culture AP students. Second, teachers perceived that their AP RCLED students had gaps in their knowledge of the “what’s and why’s and how’s” of AP, how to negotiate the demands of the class, and how to fill in these gaps that may exist because of prior experiences. Teachers perceived these pieces
of cultural capital as being essential components of AP success for their RCLED students and repeatedly noted in their interviews that their RCLED students were likely to be lacking in the cultural capital of AP.

**Willingness to strive.** The third area that several teachers discussed in their interviews as being important to success for AP RCLED students is what I have termed “willingness to strive.” For the purposes of this study, striving refers to the student’s willingness to seek extra help, put in extra time, and seek outside support. When asked about what supports exist for their AP RCLED students, several teachers immediately brought up offering extra time.

Whitney stated,

> I don’t think I have any special supports…We’re teaching and we see you struggling, “Why don’t you come in and get some extra help? Why don’t you come at lunch? You know, you and this person have lunch together. Why don’t you guys get together a couple times a week? I can stay after school this week.”

Brian also explained that he feels offering his RCLED students more of his time and support outside of class is important for their success. He said, “I just feel that I have to be available during lunches and things like that…because some of these kids need extra help, extra time and I don’t know how else to provide [that]…”

Cara also noted the importance of students taking advantage of extra help. “Many of them [RCLED students] will come for extra help, but a lot of them don’t…but I do make myself available and I try to provide many opportunities for them to come and get some extra help.”
Matt also referenced willingness to strive. He stated, “Those that are motivated, especially the RCLED … they would come during [study] period because there would be a moment for them just to have some time with me outside of the lecture environment.”

Tiffani perceived that he AP RCLED students are more likely to take advantage of extra help than her majority students.

I feel like I see more of the [RCLED] students showing up for those opportunities…. Is it because they need the help? Is because their peers are going to it? Is it because they want that extra connection and feel that level of confidence and are encouraged to go for…help at any time?... I would say it tends to be that those extra sessions...are more attended by those [RCLED] students.

Hence, teachers in this study perceived that AP RCLED students have more success when they are willing to put in extra time and take advantage of teachers’ time and help beyond the normal class time. Most teachers made some reference in their interviews to students’ willingness to strive as being a key component to their success. In teachers’ views, this is especially true for students who are in their first ever AP class or when English is not their native language.

**A pivotal combination.** While it is important to consider these three student factors for AP success individually, it is also important to note that many teachers discussed two or more of these factors in combination. In other words, to have only one of the three--emotional efficacy, knowledge of the cultural capital of AP, or willingness to strive--is not enough; successful AP RCLED students have a combination of these characteristics. For example, Brian noted that,
AP has to be demystified and the AP teacher has to be demystified for these students who come in and they seem so reticent to ask for help, not realizing that the students who do well, it’s not because they know everything, it is because they know how to ask for help and a lot of times the RCLED students seem afraid to ask for help.

In this example, Brian referenced both the students’ knowledge of the cultural capital of AP (i.e. knowing that asking for help is expected in AP) as well as the students’ willingness to strive as being factors for success for his AP RCLED students.

Cara also reflected on the importance of emotional efficacy and willingness to strive for RCLED students to be successful in her AP world history class. She stated, “I've seen such success… you know, all it really takes is for kids to advocate for themselves and be motivated and they are successful.” She brought up these two student factors later in her interview, as well.

They [RCLED students] do struggle. It’s a little bit harder for them because of language demands, the reading and writing, but they have the motivation and they will ask for help and if they do those, if they have those two components, their experience is great and they learn so much.

Matt gave a powerful example of a student who had a combination of factors that helped her to be successful in his AP psychology class.

[I have a] student now, [who] just got out of the [ESOL] program and this is her first AP. But she is so dedicated to doing it that she goes home and she translates all of my PowerPoints the night before. It comes to class, [and] she has questions
ready. She still does not know the English words for it, but she is there constantly doing hours and hours of work just to be able to be in the class and she's super motivated for that.

In this anecdote, Matt references emotional efficacy (motivation) and willingness to strive as factors that influence a student who is an English learner taking her first AP class.

Hence, teachers highlighted the importance of various student-related factors to academic success for AP RCLED students. They also discussed, however, how these student strengths must exist in combination, rather than singularly. Teachers in this study perceived that having a combination of emotional efficacy, knowledge of the cultural capital of AP, and willingness to strive were important to AP RCLED students’ success.

**School factors.** In addition to the intrinsic characteristics teacher participants identified as important to the AP RCLED students’ success, teachers also noted two school factors that they believe influence these students’ success in AP classes. Teachers brought up these school factors repeatedly during their interviews. These factors are classified as: 1.) formal supports; and 2.) time.

**Formal supports.** Teachers frequently discussed support outside the classroom as a school-related factor for RCLED students’ success in AP classes. Non-classroom supports have been linked to RCLED student success in other research, as well (Davis et al., 2013; Dingle Swanson & Nagy, 2014; Wiggan & Watson, 2016). Many teachers in my study noted supports that currently existed, but teachers also discussed supports that
they wished existed for AP RCLED students. Teachers overwhelmingly felt that not enough formal supports for AP RCLED students currently existed.

Brian noted that it is challenging to find a balance of rigor and support. “The challenge there is, how do you make it feel like you make it challenging enough but also giving the support that the students need, the scaffolding that they need?” Tiffani also brought up the importance of supports for AP RCLED students.

You never want to set up students for failure, you know, it's supposed to be a process of building their self-esteem, not knocking them down. So making sure they’re in the right place….to make sure the students felt a sense of safety and support.

Several teachers stated that there are some formal supports for their AP RCLED students: the teachers themselves; the school’s Writing Center; MSAN (Minority Student Achievement Network); the school’s Minority Achievement Coordinator; school counselors and administrators. But several also expressed a wish for more formal supports for this group of students, as well as more encouragement for students to take advantage of the supports that did exist at the school for AP students.

Cara discussed the lack of support and the lack of students accessing the supports that did exist.

In my opinion there's not enough support. I tried, several of us tried to start, build the culture of supports for AP students, all AP students, and it's kind of faltered. There was a summer AP workshop that that we had for a couple of years but then it just kind of faltered for, I think, lack of support….I'm not sure of all the reasons
for that. It was said that we didn't have the space during the summer [because of] construction, summer school, but I don't think that should've been a barrier. We do have AP Scholars. I am an AP Scholar mentor. So far none of those students have come to me… none of them has reached out to me in any way. So, I see the support is there, but I just don't see kids accessing it.

Again, it is important to note that several teachers discussed support in combination with factors discussed previously. They perceived that there could and should be more school-initiated supports that could help students manage the student-centered factors for AP success.

Brian, for example, wished for emotional support for AP RCLED students, noting social isolation, an idea several teachers referenced in their interviews.

If the minority students in AP classes just had somewhere that they could go, just by themselves, to talk about it … I don’t know, just like find one another, because there’s, like, one or two in a class, and something I noticed is social isolation within the class.

In a similar vein, Cara suggested that effective mentoring would be helpful for AP RCLED students.

I've had past students who I have encouraged to be tutors and mentors, but again I don't think that's happening. So I think they need they need that mentorship. I think it would help they and again it's more about making sure the experience is positive on multiple levels.
Both Brian and Cara pointed out the need for AP RCLED students to have structures in place to support their emotional efficacy in the AP environment, and wished there were school-based mechanisms to provide this support.

Cara also referenced how school-based supports could help mediate the effects of the gap in the cultural capital of AP that many RCLED students arrive with.

I think something needs to happen before they hit the door grade in 10th grade… because…once school starts it's, they [AP RCLED students] are just overwhelmed and some of them just immediately drop because they can't work at that pace. I think if they had the support, if they knew how to get organized, what to expect sooner, I think they wouldn't panic during the second week. So, I think something needs to happen sooner, support-wise, formal support.

In this example, Cara observed that many AP RCLED students are lacking in the knowledge of how to manage an AP class, and that more formalized support from the school for the students, specifically, would help these students be more successful.

Matt also expressed a desire for formal support in the form of establishing relationships with both students and their parents or care-givers and building students’ comfort-level being in an AP class earlier as a way to help AP RCLED students be more successful. He stated that he wished there were some sort of support from the other side. If I went to speak with them ahead of time or in the spring, the time when they talk about classes. If I interacted with them where they knew that that’s where they were coming in, instead of the shock of being thrown in on the first day, which no matter how long you’ve been at this
school, that first day is going to be tough because just because you have that constant reminder that you are not like everybody else in that room, especially at these higher levels. So if there's a way to they knew they could be secure walking in….I try my hardest to create that environment on the first thing, but…I think inviting a bigger culture change doesn’t mean I am not gonna not do it but I feel like there could be something that we could do.

In this example, Matt tied together several of the factors discussed previously as being important indicators of culturally relevant practice for RCLED student success: positive classroom relationships, family involvement, and student comfort in the AP environment.

In a similar way, Tiffani tied together the need for more school-based support to the importance of families accessing the cultural capital of AP.

I think the one thing that I would like to see more of…is multi-linguistic reach-outs to parents of students who English is not their first language or English isn't a language that they are in command of…to explain the AP [ecosystem] and program and how their students can set themselves up…to take [AP]. You know what things they do….It would help at the greater school level…so that they're not trying to navigate all the time in English if it's not a language that they’re comfortable in, for the parents, for the people in charge of these [RCLED] kids.

Later in her interview, she again discussed the importance of families having access to the cultural capital of Advanced Placement, and suggested the College Board should work harder to provide this key element to RCLED students’ success.

I think if the College Board could make a push to publish information in multiple
languages for caregivers to have access to, to explain…. I think that would be really awesome, because the parents would get it more about what's going on.... And then they could probably be more of a support network for their students and make sure that they have the time they needed to study and make sure they have the resources available so that even if, “We will drive you to the library,” or, you know, “We’ll make sure that you have a ride home,” or “Here's, you know, the Metrocard and…here is the time to go. We are not going to have you babysit your brothers and sisters this night because we know you need to study.” And if maybe they [the parents and caregivers] understood, sort of, the largeness of the goal that they [the students] are taking on for the course they might be willing to be able to figure something out together.

In conclusion, teachers discussed the importance of RCLED students having formal support beyond the teacher and beyond the AP classroom. They noted that several support structures exist at North High School, but they were much more effusive about supports that do not exist currently, but that they think would be helpful to improve achievement of AP RCLED students. Their ideas for school-based supports that would be helpful tied back directly to the student-centered characteristics that the teachers identified as important for AP success, as well as referencing ways to better involve families and caregivers of AP RCLED students, one of the elements of culturally responsive pedagogy featured in the CRIOP framework.

**Time.** The second school-related factor that several teacher participants discussed as an obstacle to success for their AP RCLED students was time. Teachers almost
unanimously wished they had more time with their students before the AP exams in May each year. Most perceived that more time would be beneficial in AP RCLED students’ success. Tiffani, for example, stated,

I wish that the College Board would mandate a certain amount of required school days before the exam…[and] it is never good for students to walk into a classroom feeling like everything's being pushed at them… and I struggle to fit everything in. Time is the biggest challenge… to get deep knowledge out of it, because that is what you want….  

Brian concurred. When asked what he wished he could tell the College Board, he responded, “Time. I wish that I had more time. I feel that me having more time would be a resource for them. Honestly.”

Cara also brought up this need.

Time. There is not enough time to meet the needs of the students that are seeking that challenge necessarily. I mean, you know, some kids come and are able to keep up with the pace of it, but then there are other students that they want that challenge but I can’t slow it down.

She also related the lack of time to how students feel and how well they are able to keep up with the class.

What’s overwhelming [for students] is the pacing and I don't know that [the College Board] could slow it down. You know, the things that would help, I think, are outside of their control. Things like being able to start school before Labor
Day so we had another week when most of the world, most of the other students [taking AP courses] do start before Labor Day. So we are at a disadvantage.

Similarly, when asked what she would tell the College Board to improve the experience in AP physics for her students, Whitney immediately pointed out that she wishes her course were two periods per day. When asked why, she stated,

It's too much and too fast to do it any other way, especially if it’s a first year [AP] course. But if they are going to get a good hands-on experience (really, that's where they master the material) they've got to have it two periods a day.

Otherwise it's just a bunch of words.

The teachers in this study almost unanimously wished for more time with their AP classes. They felt strongly that more time would result in better academic achievement for the AP RCLED students, simply by virtue of the fact that they would have more time to cover the material and students would feel less rushed. As noted previously, this is a struggle with which most teachers felt their AP RCLED students are challenged. Despite this wish, however, most teachers recognized that the time challenge is not one easily solved by the school itself.

**Summary**

When looking at the data I collected for this study through observations and interviews, building culturally responsive classroom relationships was the domain in which the teacher participants overwhelmingly scored the highest using the CRIOP tool. Teachers frequently related the importance of these relationships to other culturally responsive practices and other factors they perceived as being important for RCLED
students’ success in Advanced Placement classes. Another area in which the teachers in the study scored relatively well was in their use of culturally responsive instructional practices. Teachers scored less well in the CRIOP domains of Assessment Practices, Discourse, Sociopolitical Consciousness, and Family Involvement. Despite these lower scores, however, there were several pertinent observations related to the teachers’ actions and beliefs about these factors. Teachers also identified in their interview responses both student- and school-related factors that they perceived as being important to AP RCLED students’ success. In the final chapter, Chapter Five, I discuss my conclusions and the implications of the findings described in the present chapter and seek to synthesize and make meaning from them. I also offer suggestions for future research and recommendations for education stakeholders interested in findings creative ways to address the Excellence Gap in Advanced Placement classes.
Chapter Five

Introduction

The purpose of this study is to describe the perceptions and culturally responsive pedagogy of Advanced Placement (AP) teachers of successful racially, culturally, linguistically, and ethnically diverse (RCLED) AP students. This research is significant because students of diverse cultures and backgrounds have traditionally been underrepresented in programs for high achievers such as the Advanced Placement program (College Board, 2014; de Wet & Gubbins, 2011; Moore & Slate, 2008; Peters & Engerrand, 2016; Whiting & Ford, 2009). As a result, there exists in our schools an achievement gap at advanced levels of learning, referred to as the Excellence Gap (Plucker & Peters, 2016; Plucker et al., 2010). In the interest of equity and justice, educators are obligated to seek ways to make gifted and advanced-level learning programs more inclusive and representative of our students and our nation. At the same time, our high-potential and gifted students hold the keys to future advancements, inventions, and improvements. By studying the teachers of AP RCLED students, therefore, I sought to find examples of what effective teachers of AP RCLED students believe and do in order to suggest how schools might select and prepare more effective AP teachers for RCLED students, and thereby have a positive impact on the Excellence Gap.
In Chapter Two, I provided the literature base that synthesized the landscape of research on diverse students’ place within education for the gifted, the Excellence Gap, RCLED students’ performance in Advanced Placement classes as a lens through which we can examine that gap, and the significance of teachers for diverse students’ achievement. The theoretical framework for this study was based on the tenets of culturally responsive pedagogy (CRP), which can be described as not simply, “a collection of strategies, but…a consistent mindset that influences a teacher’s planning and lesson implementation” (Powell & Rightmyer, 2011, p. 154).

My study was driven by three research questions:

1. What are the educational and professional development experiences of teachers of AP courses who have shown consistent success with Advanced Placement racially, culturally, linguistically, and ethnically diverse (RCLED) students? (“Success”= a score of 3+ on AP exam)

2. What are these teachers’ beliefs about teaching Advanced Placement RCLED students?

3. In what ways do AP teachers who are successful with AP RCLED students exhibit aspects of culturally responsive pedagogy in their practice?

The answers to these research questions cannot be stated in linear order. Instead, the answers are interrelated and were revealed throughout the observation and interview data. Hence, the following discussion is framed in terms of overarching conclusions within which I address the individual research questions.
In order to investigate the stated research questions, I completed a qualitative case study of five Advanced Placement teachers whose AP RCLED students had historically out-performed the county’s average on the course AP exam. I observed each of the five teacher participants on two occasions using the *Culturally Responsive Instruction Observation Protocol* (CRIOP) (Powell et al., 2014). In addition, I conducted semi-structured interviews with each teacher-participant. The interview protocol was partly based on the work of Ladson-Billings (2009) and partly from the Family Collaboration Interview Protocol that is included as part of the CRIOP tool. I described the research methods that I used to collect and analyze the data for this study in Chapter Three.

Through my data analysis, I determined that the data could be organized both according to the a priori themes of the CRIOP framework as well as by themes that fell outside this framework. In Chapter Four, I presented the findings of the observations and interviews after I conducted inductive and deductive thematic analysis of my observation notes, CRIOP scoring forms, and interview transcriptions.

In this final chapter, I draw meaning from the findings in this study. Many of the factors that I discussed in Chapter Four are interrelated in the web of culturally responsive practices that appear to help RCLED students succeed in AP classes. But there were some factors that resonated more profoundly with the teachers in this study whose RCLED students have historically been successful on the end of course AP exam. These resonating factors form the basis of the conclusions I have drawn from my study.
Conclusions

After reviewing the findings in this study, I drew three overarching conclusions. The first two are related in that they speak directly to CRP. The third conclusion is drawn from the teachers’ discussion of the various barriers that may impede AP RCLED students from being successful and, as an extension, those supports that currently exist and those that should exist to help these students meet with academic success in the AP environment.

**Classroom relationships as the foundation for success.** By far, the most noteworthy element of culturally responsive pedagogy that emerged in the data for this study was in the domain of classroom relationships. Not only did teachers in this study score the highest in this element of CRP using the CRIOP tool for classroom observations, they also referred to the idea of establishing positive classroom relationships with their students repeatedly in their interview responses. Their observed actions and stated beliefs about teaching AP RCLED students revealed their desire and ability to create positive, caring relationships with their AP RCLED students. As noted in Chapter Two, culturally responsive caring is one of the most important elements of culturally responsive pedagogy (Dingle Swanson & Nagy, 2014; Garza, 2009; Gay, 2000; Perez, 2000). When students feel cared for, they are more likely to be motivated and to have higher academic achievement; this is particularly true for RCLED students (Gay, 2010; McCollum, 2014; Martin & Dowson, 2009; Perez, 2000). Hence, the fact that culturally responsive classroom relationships, and the beliefs and actions that are tied to
building such relationships, were so salient in the data underscores the importance of these relationships for RCLED students’ success in the Advanced Placement setting.

The importance of classroom relationships in this study spoke to all three of my research questions. In response to Research Question 1, “What are the educational and professional development experiences of teachers of AP courses who have shown consistent success with Advanced Placement racially, culturally, linguistically, and ethnically diverse (RCLED) students? (“Success”= a score of 3+ on AP exam),” the teacher participants in my study revealed that their prior experiences cultivated a culturally responsive mindset (Powell & Rightmyer, 2011). This mindset led them to have an appreciation for diversity, an openness to differences, and a belief that diversity brings depth and benefits the overall classroom environment. In turn, this mindset forms the basis of the culturally responsive classroom relationships the teachers in the study were so adept at creating.

In response to Research Question 2, “What are these teachers’ beliefs about teaching Advanced Placement RCLED students?,” the teachers in this study expressed a variety of beliefs throughout their interviews that reflected their commitment to establishing culturally responsive relationships with their AP RCLED students. These beliefs reflected their ethic of caring for students and a desire to know their students, both academically and personally. For example, several participants noted that caring about young people and wanting to be involved in their lives as reasons they became teachers. Matt and Cara both provided anecdotes that reflected their desire as teachers to see their RCLED (in these two cases, English learners, specifically) succeed in the challenging AP
environment. Moreover, as I described in Chapter Four, I felt a genuine sense of caring in each of the teachers’ classrooms, both in the teachers’ demeanors and in their interactions with students. The teachers interacted with students in a genuine, personal way; they knew what sports their students were involved in and asked about them; they acknowledged when a student had been sick and expressed concern; they used examples in their teaching that reflected a sincere understanding of and respect for their students as teenagers and developing individuals. Teachers in my study used words like, “relationships,” “connection,” “knowing,” and “bond” in describing the goals they had for establishing relationships with their AP RCLED students. Several teachers mentioned that they wanted their RCLED students to feel safe in their classrooms. Each of these beliefs reflected one of the most fundamental aspects of culturally responsive pedagogy, care, which is rooted in the way the teacher forms relationships with her students (Davis et al., 2013; Dingle Swanson & Nagy, 2014; Powell et al., 2014).

Noddings (2005) stated that caring involves a desire by the “one-caring” to see positive outcomes for the “cared-for” (p. 25); in the case of a teacher, caring involves the desire to see positive outcomes for the student, and for the teacher to take steps to help bring about these positive outcomes. The first half of this statement, the desire, speaks to Research Question 2, while the second half, the action, speaks to Research Question 3, “In what ways do AP teachers who are successful with AP RCLED students exhibit aspects of culturally responsive pedagogy in their practice?” In taking action to put their caring into practice, the teachers in this study demonstrated culturally responsive pedagogy. Teachers in this study created positive classroom relationships with their
RCLED students by purposefully making efforts to connect with their students and by using thoughtful and purposeful physical classroom characteristics, such as flexible grouping of students and displays of multicultural visual materials, to prompt positive classroom relationships. In addition, the teachers successfully created a family-like atmosphere in each of their classrooms where both personal interactions (between students and the teacher and among students) and instructional practices created a community of learners engaged in creating knowledge together.

Prior research (for example Cornelius-White, 2007; Davis et al., 2013; Dingle Swanson & Nagy, 2014; Hernandez Sheets, 1995; Ladson-Billings, 2009; Martin & Dowson, 2007; Wiggan & Watson, 2016) has suggested that positive personal relationships and the creation of a supportive community of learners lead to positive outcomes for RCLED students, including higher academic achievement and a positive, scholarly self-concept. The teachers in this study, whose AP RCLED students have been historically successful on the AP exam, were particularly cognizant of the need to develop such caring, connected relationships with their students and were particularly adept at creating such relationships in the context of a supportive, family-like atmosphere. Hence, this meaningful, culturally responsive relationship-building between teacher and student forms the foundation of success for AP RCLED students.

**Returning to a reconceptualization of CRP.** Before moving on to my second overarching conclusion, I would like to briefly return to the reconceptualization of the hierarchy of CRP as described in Figure 2 in Chapter Four. When I first read through the data, it was almost immediately apparent that CRIOP Pillar I: Classroom Relationships
was mentioned frequently in the teacher interviews and seen often in the classroom observations. It was only after my repeated reading and analysis of the data, however, that I began to realize just how salient this pillar of CRP was turning out to be. In deriving meaning from the findings, therefore, I have attempted to relay the importance of this finding as a researcher. Yet, as a teacher myself, I also recognize that the message of creating culturally responsive, positive classroom relationships is one practitioners have heard before, many times. So often, in fact, that it risks losing its substance as just more jargon and “education-ese.” As a result, I return to Figure 2 to re-emphasize the importance of building positive classroom relationships, based on genuine care, as the foundation for success for RCLED students in the AP classroom. My research indicates that it is on the foundation of positive classroom relationships that the other elements of CRP rest.

**Culturally responsive instructional practices.** The second conclusion that I drew from my research also speaks directly to the framework of CRP: teachers of successful AP RCLED students use culturally responsive instructional strategies in their teaching. CRIOP Pillar IV: Instructional Practices, was the area in which the teachers in my study scored the second highest using the CRIOP observation tool. Teachers also referenced their use of culturally responsive instructional strategies during their interviews. As stated earlier, Ladson-Billings (2009) noted that culturally responsive teachers make purposeful, pedagogical choices aimed at supporting the diverse students in their classes. Culturally responsive instructional strategies include practices such as scaffolding, shared meaning-making, hands-on learning, and instruction that is situated in
students’ lives (Garza, 2009; Hynds et al., 2011; Ladson-Billings, 2009; Powell et al., 2014). The teachers in this study demonstrated all of these culturally responsive instructional practices in their AP classrooms.

The teachers’ use of culturally responsive instructional strategies responds to two of my three research questions. As mentioned earlier, Hattie (2009) reiterated the importance of the teacher’s insight into students’ knowledge as well as her grasp of how to move her students up the continuum of mastery of target knowledge. Ladson-Billings (2006) insisted that, to become successful teachers of diverse students, teachers “must begin to understand the ways our theories and philosophies are made to manifest in the pedagogical practices and rationales [they] exhibit in the classroom” (p. 30). This denotes the connection between a teacher’s beliefs about her students and the actions she takes as a result of her beliefs. In this way, Research Questions 2 and 3, and the data that offered insight into these questions, are very closely related when discussing teachers’ culturally responsive instructional practices.

In response to Research Question 2, “What are these teachers’ beliefs about teaching Advanced Placement RCLED students?,” when teachers discussed their use of culturally responsive instructional practices in their interviews, they were sharing their beliefs about teaching AP RCLED students. When asked about what works for AP RCLED students, the teachers in this study had a clear understanding of the culturally responsive instructional practices that they needed to use to help their RCLED students learn. For example, Whitney discussed what she called the “learning cycle.” This instructional practice involved the culturally responsive practices of hands-on learning.
and letting students create meaning no matter where they are starting from (Ladson-Billings, 2009). Similarly, in her interview Tiffani discussed the importance of scaffolding learning for her AP RCLED students, another culturally responsive instructional practice (Ladson-Billings, 2009). The teachers’ beliefs about instructional practices that were effective for their AP RCLED reflected a belief that culturally responsive pedagogy is effective for AP RCLED students, even though none of the teachers specifically used the term CRP in their interview responses.

The classroom observation data on instructional practices speak to Research Question 3, “In what ways do AP teachers who are successful with AP RCLED students exhibit aspects of culturally responsive pedagogy in their practice?” Not only did the teachers in this study understand that culturally responsive instructional practices would benefit their students, they took action on these beliefs as seen when I observed their classroom instruction. Teachers demonstrated culturally responsive instructional practices such as scaffolding, connecting new learning to previous learning, hands-on learning, and shared meaning-making in a classroom community (Hynds et al., 2011; Garza, 2009; Ladson-Billings, 2009; Powell et al., 2014). For example, in his AP Psychology class, Matt connected students’ new learning about Freud’s stages of development to the students’ prior knowledge of Erickson’s and Piaget’s stages. Whitney used hands-on and exploratory learning in her AP Physics class when students experimented with paper balls and a hoop to spark their thinking about the scientific concept of flux. Brian had his AP English students sit in a circle to encourage shared meaning-making. He was a member of the learning community, encouraging the students to make meaning together rather
than just look to the teacher for answers. These culturally responsive models of instruction, seen in many of my classroom observations, is in contrast to a non-responsive, receptive model where the teacher delivers knowledge to passive students (Powell et al., 2014).

Overall, the AP teachers whose RCLED students have historically been successful on the end-of-course AP exam used culturally responsive instructional practices in their classes. Despite the fact that no teacher specifically used the term CRP (or any similar terms) in their interview responses, the AP teachers repeatedly expressed their beliefs that culturally responsive instructional practices benefit their RCLED students. They acted upon these beliefs in their classroom instruction by employing a variety of culturally responsive instructional strategies. Hence, the thoughtful and purposeful use of culturally responsive instructional practices is an important element of a classroom where AP RCLED students succeed.

**Barriers and bridges to success for AP RCLED students.** The final conclusion that I drew from my research is that teachers recognized various barriers to success in AP classes for RCLED students, and that more supports are needed to minimize these barriers to success. This conclusion is drawn from data that fell outside of the a priori categories for culturally responsive pedagogy that I used to code and analyze my data. While teachers noted several attributes of the school and the students that contribute to AP RCLED students’ success, within this discussion they also repeatedly noted some perceived challenges to their students’ success in their AP class.
This final conclusion relates again to Research Questions 2 and 3 of my study. In relation to Research Questions 2, “What are these teachers’ beliefs about teaching Advanced Placement RCLED students?,” teachers identified several student attributes such as comfort, desire, persistence, and motivation as factors that helped their AP RCLED students succeed. To a large extent, these are factors over which schools have little control. However, the positive personal relationships the teachers in this study established with their students could certainly help to support and develop these positive personal attributes in students. For example, returning to Cara’s example of the EL student who had difficulty reaching the writing requirements for the AP class, the student clearly exhibited persistence in her efforts to achieve this goal. But Cara’s personal relationship with the student, her support in giving the student extra time and attention, and her belief that the student could and would achieve her goals surely helped to encourage the student’s persistence. Hence, once again the culturally responsive teacher, and the positive relationships she builds with her RCLED students, can help to develop and encourage the characteristics of emotional efficacy that the teachers in this study stated were important to their AP RCLED students’ success.

One of the main challenges teachers identified to their RCLED students’ success in AP classes was that many RCLED students and their families lack the cultural capital of Advanced Placement. Research has supported this phenomenon (Ford, 2011; Hallett & Venegas, 2011; Hardesty et al., 2014; Kyburg et al., 2007). As discussed previously, Montoya et al. (2016) related this lack of cultural capital for families of diverse students directly to the achievement gap. When students and families lack the knowledge of why
AP classes are important, how to access opportunities to take these classes, and how to capitalize on the many existing supports that can help students succeed once they are in these classes, they are at a distinct disadvantage in comparison to students of the majority White culture who do tend to have this knowledge. Matt noted in his interview that White students “expect” to take AP classes whereas the expectation for diverse students is that AP is a stretch. This very expectation is a form of cultural capital (Montoya et al., 2016); the idea that AP is a right to which the White students are entitled. The teachers also noted the fact that many of their White AP students have been prepared by previous teachers to take AP classes, again, relating to the idea that AP is expected for White students. They commented on the fact that the RCLED students in their AP classes did not seem to be used to the challenge or rigor, suggesting that their previous teachers had not prepared these diverse students with the expectation that they would take AP classes. These challenges have been noted in prior research, as well (Grantham, 2012; Olszewski-Kubilius & Clarenbach, 2011). The teachers in my study indicated that their AP RCLED students and their families typically have less access to the kinds of cultural capital surrounding Advanced Placement classes than do their White students and perceived this to be a noteworthy barrier to their success in AP.

It may be tempting to suggest that by noticing these challenges that AP RCLED students face, the teachers in this study were operating from a deficit perspective as related to their beliefs about their RCLED students. It has been well-documented that teachers often hold a deficit view of RCLED students (Ford & Grantham, 2003; Harris et al., 2009; Neumeister et al., 2007; de Wet, 2006). However, based on the data discussed
in my research and the first two conclusions presented in this chapter, I think that would be incorrect. When discussing the challenges that their AP RCLED students faced with relation to the cultural capital of AP, the teachers did not say or suggest that the RCLED students were not cognitively suited for the rigor of AP. Rather, they pointed to the gaps in practical skills preparation that the RCLED students brought because their prior teachers did not equip these diverse students with the same practical knowledge about how to manage and maneuver through such challenging courses. Furthermore, many of the teachers talked in their interviews about how they have worked alongside their students to help them overcome these challenges and how they actively seek to create an atmosphere that will promote the factors that they noted as being facilitators to success, such as personal relationships and a sense of safety and comfort for RCLED students in their classrooms. This fact relates to Research Question 3, “In what ways do AP teachers who are successful with AP RCLED students exhibit aspects of culturally responsive pedagogy in their practice?” As noted earlier, the teachers in this study demonstrated that they care about their RCLED students and took meaningful actions to support their RCLED students’ success in the AP class. One poignant example, again, is in the case of Cara, who described an EL student who struggled with the writing demands of her AP World History class. In Cara’s description of the student, she expressed great empathy and caring, and noted how she devoted extra time to help the student finally achieve success. There can be no doubt that Cara’s beliefs and actions were exemplary of culturally responsive pedagogy.
A second barrier to success that AP teachers noted was time. Specifically, teachers said they simply do not have enough time with their students to allow them a deep mastery of the AP content prior to the exam. As noted in Chapter Two, Plucker and Peters (2016) highlighted the success of front-loading programs, operating like “advanced education boot-camps,” (p. 130). Teachers in my study said the school system had tried such efforts in the past, but they were abandoned for reasons unknown to the teachers. By and large, the teachers felt that, while time was definitely a barrier to their AP RCLED students’ success, they had no control over this barrier aside from the limited amount of time they could find to work with students before, during, or after school.

The second piece of my final conclusion has to do with the supports that existed (or that teachers wished existed) to help AP RCLED students transcend the aforementioned barriers to success. Several research studies have examined the role of various types of supports that can lead to diverse students’ success (Davis et al., 2013; Dingle Swanson & Nagy, 2014; Theokas & Saaris, 2013). While it does not directly answer any of the three researcher questions I posed, this conclusion does relate back, in a broad sense, to Research Question 3, “In what ways do AP teachers who are successful with AP RCLED students exhibit aspects of culturally responsive pedagogy in their practice?” Teachers in my study identified supports that existed for their AP RCLED students, several that had to do with personal attributes of the students and several that had to do with the school. The most frequently cited school support was that of another adult in the building who could contact parents, offer extra support, or who already had a positive relationship with a student. The teachers mentioned counselors, the bilingual
resource assistant, and the Minority Student Achievement Coordinator as being helpful supports for their AP RCLED students’ success. Again, this points to the importance of the community aspect of culturally responsive pedagogy as an integral aspect of helping AP RCLED students succeed (Davis et al., 2013; Dingle Swanson & Nagy, 2014; Gay, 2010; Ladson-Billings, 2009; Wiggan & Watson, 2016). Hence, although this conclusion does not directly answer the question about culturally responsive pedagogy used by the teachers, it does speak more broadly to at least this one aspect of culturally responsive pedagogy that exists within the school at large to support AP RCLED students.

Beyond the supports that already existed for AP RCLED students, the teachers in this study also frequently mentioned that they wished there were more supports. They mentioned summer programs, social-emotional supports for students, mentoring, and family outreach as supports that they believed would be helpful. These ideas are all supports that previous research suggests are, indeed, helpful for high-potential RCLED students (Davis et al., 2013; Dingle Swanson & Nagy, 2014; Plucker & Peters, 2016).

**Summary.** There were three overarching conclusions that I drew from the data I collected for this research study. Each of these conclusions indicated that the AP teachers in this study held culturally responsive pedagogical beliefs, and that their actions reflected these beliefs in their culturally responsive practices. There are several meaningful implications for these conclusions, as well.

**Implications**

The implications for the results of my study are clear. The AP teacher is an integral factor in the AP classroom. Past research has suggested that the teacher is a
pivotal influence on the success of the students in her classroom (Ferguson, 2007; Ford, 2011; Hattie, 2009; Ladson-Billings, 2009). Hence, if schools are to close the Excellence Gap in Advanced Placement, we must look at the beliefs and practices of the AP teacher. My study of teachers whose AP RCLED students have historically been successful on the AP exam indicates that AP RCLED students thrive under the guidance of culturally responsive AP teachers. These teachers care about their students, work hard to create personal relationships with them, and establish a classroom community that is warm and supportive. These teachers operate from a culturally responsive mindset that values diversity and the diverse perspectives brought to the AP classroom by RCLED students. From this foundation, culturally responsive AP teachers thoughtfully and purposefully use culturally responsive instructional strategies, such as scaffolding and hands-on learning experiences, to engage and support their RCLED students’ learning. Finally, culturally responsive AP teachers recognize the barriers that AP RCLED students face and actively work to build bridges to their success, although more comprehensive, school-wide supports are needed. In short, that which leads to RCLED students’ success in the Advanced Placement classroom mirrors that which leads to RCLED students’ success in every classroom: namely, teachers who implement culturally responsive pedagogy.

**Recommendations**

Based on the findings and conclusions of my dissertation study, I would make several recommendations to education stakeholders who are interested in closing the Excellence Gap in Advanced Placement classes.
1. AP teachers must be given the time and the tools to build positive, culturally responsive relationships with RCLED students. Nearly every teacher in my study complained that they wished they had more time to help their AP RCLED students be more successful. More time would allow a deeper mastery of the AP content; moreover, as Noddings (1988) pointed out two decades ago, teachers need more time to create caring, meaningful relationships that lead to positive student outcomes. Yet school boards and legislators put other interests ahead of decisions that would create more time for AP teachers and their students to create relationships, supportive learning communities, and deeper understanding of the AP curriculum, such as summer institutes and flexible school calendars. I recommend that stakeholders reevaluate creative solutions that will give AP teachers more time with their AP RCLED students, specifically.

2. While teachers in my study identified some student characteristics that they believed helped their AP RCLED students succeed, teachers are the only factor in the classroom over which schools have control in order to close excellence gaps. Therefore, culturally responsive teachers must be recruited and/or developed to teach Advanced Placement classes. Current Advanced Placement teachers must be given training and professional development on the tenets and benefits of engaging in CRP in the AP classroom. All of the teachers in my study received special preparation and professional development prior to teaching their first AP classes. However, when asked
about professional development experiences that specifically helped them to meet the needs of the RCLED students in their AP classes, only one teacher could recall any such professional development. Moreover, this professional development was not specifically related to her preparation to teach AP classes. Yet, all of these teachers engaged in culturally responsive pedagogy in their AP classrooms as a means of supporting the success of their RCLED students. At the same time, these teachers are exemplary in that their AP RCLED students have typically out-performed other teachers’ AP RCLED students on the AP exam. Schools, researchers, and organizations associated with AP do not currently systematically track or develop culturally responsive teaching practices in teachers of Advanced Placement RCLED students, missing a significant opportunity to advance RCLED students' success in AP classes. As a result, the College Board, school systems, and/or individual schools should recruit and develop AP teachers who demonstrate a culturally responsive mindset (Powell & Rightmyer, 2011) and who are adept at or eager to learn and implement the tenets of culturally responsive pedagogy in their AP classrooms.

3. Comprehensive, school-wide supports suggested by the teachers mirror those that research has found to be effective (Davis et al., 2013; Dingle Swanson & Nagy, 2014; Plucker & Peters, 2016). Schools and school systems must look at research on interventions that have been found to be effective and consider how such supports can be implemented in order to help AP RCLED students
and their families gain the cultural capital of AP, build a strong, supportive community of learners among themselves so that they feel supported, and front-load AP curriculum to increase students’ success in the class and on the exam. Statistics make it clear that what schools are currently doing has had little effect on closing the Excellence Gap in AP (College Board, 2014); therefore, schools and AP program coordinators must look to do things differently if they are going to expect to make a difference for AP RCLED students’ success.

4. Currently, there is no observation protocol or mechanism to gauge culturally responsive pedagogy specifically designed for use in the AP classroom. Indeed, few AP teachers engage in observation and self-reflection as related to their culturally responsive pedagogy. In this, however, AP teachers and AP coordinators are missing a potentially powerful means to address the Excellence Gap in their own schools and classrooms. As discussed in Chapter Four, the CRIOP (Powell et al., 2014) was an effective tool to observe CRP of AP teachers to a point. However, some of the unique features of the AP program confounded the scoring of teachers’ CRP in the AP classroom using this tool, especially as it was designed for use in the literacy classroom and is more compatible with the elementary school setting. Hence, observation protocols could and should be developed for CRP that are specifically designed for the AP environment.
These recommendations, based on the findings and conclusions from this research study, should be considered by schools, teachers, and AP program coordinators who are interested in finding practical methods to address the AP Excellence Gap for RCLED students.

**Suggestions for Future Research**

Several possible areas of future research emerge from my study on the culturally responsive pedagogy of AP teachers. The first would be a larger study of AP teachers whose RCLED students have historically been successful on the end-of-course AP exam. My study is limited in its generalizability due to its small sample size. A larger study of similar teachers in various settings would add to the generalizability of the conclusions of this study. A second area of possible future research would be to study how RCLED students who have been successful on the AP exam perceive their teachers with regard to CRP. A study that included both teacher interviews and observations as well as students’ perspectives of teachers’ CRP would be especially informative. Overall, more research is needed that specifically looks beyond simply closing gaps in opportunity for RCLED students in Advanced Placement. Rather, research must explore how to close the achievement Excellence Gap for RCLED students in Advanced Placement classes.

**Closing Thoughts**

In their seminal book on excellence gaps, Plucker and Peters (2016) suggested a framework for reducing and eliminating excellence gaps in U.S. schools. Among their suggestions for interventions is “better educator preparation and support” (p. 181). Based on the findings and conclusions of my research study, culturally responsive pedagogy
must be an essential part of such efforts. While decades of attention have been paid to achievement gaps at minimum competency levels, education has largely neglected the need to proactively address excellence gaps. However, excellence gaps in education are undeniable and persistent. If we as a nation are ever to realize the goals of Brown vs. the Board of Education, true equity, at all levels, then we must work to bring equity in education to high-achieving and high-potential racially, culturally, linguistically, and ethnically diverse students.
Appendix A

Institutional Review Board Approval Letter

Office of Research Integrity and Assurance

Research Hall, 4400 University Drive, MS 6D5, Fairfax, Virginia 22030 Phone: 703-993-5445; Fax: 703-993-9590

DATE: October 21, 2014

TO: Beverly Shaklee, Ph.D

FROM: George Mason University IRB

Project Title: [635245-1] Culturally Responsive Pedagogy in Advanced Placement Teachers of Racially, Culturally, Linguistically, and Ethnically Diverse Students

SUBMISSION TYPE: New Project

ACTION: DETERMINATION OF EXEMPT STATUS

DECISION DATE: October 21, 2014

REVIEW CATEGORY: Exemption category #1 & 2

Thank you for your submission of New Project materials for this project. The Office of Research Integrity & Assurance (ORIA) has determined this project is EXEMPT FROM IRB REVIEW according to federal regulations.

Please remember that all research must be conducted as described in the submitted
materials.

Please note that any revision to previously approved materials must be submitted to the ORIA prior to initiation. Please use the appropriate revision forms for this procedure.

If you have any questions, please contact Karen Motsinger at 703-993-4208 or kmotsing@gmu.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within George Mason University IRB’s records.

- 1 - Generated on IRBNet
Appendix B

Contact Letter to Principals Seeking Participant Nominations

Date

Hello ____________________.

My name is Tracy Miller Maguire and I am an APS teacher and a doctoral student at George Mason University. I am contacting you today to ask for your assistance in my dissertation study. My study will focus on Advanced Placement teachers of racially, culturally, ethnically, and/or linguistically diverse students who have been successful on the AP end-of-course exam (earning a score of 3 or higher). I am seeking your assistance in identifying which AP teachers in your building meet this description.

Once you have nominated these exemplary AP teachers, I will contact them personally to ask for their participation in my study. I am seeking your help, as the school principal, to nominate teachers since you (or your designee) would be most likely to know which AP teachers in your school have tended to have success with diverse AP students. Through this study, I am hoping to better understand the characteristics of such teachers so that we, as a community of educators, can better help diverse students succeed in Advanced Placement classes.

For the purposes of this study, I am excluding AP teachers of AP world language and AP visual/performing arts. I am happy to talk with you in person or via telephone if
you would like any additional information about this study. This study has been approved by the Institutional Review Board at George Mason University as well as Arlington County Public Schools.

Thank you in advance for your help in identifying exemplary AP teachers of diverse students in your building. I look forward to receiving your nominations in the next few weeks.

Sincerely,

Tracy Miller Maguire

tmiller4@gmu.edu
Appendix C

Contact Letter to Potential Teacher Participants

Date

Hello (name),

My name is Tracy Miller Maguire and I am an APS teacher and a doctoral student at George Mason University. I am contacting you today to ask for your assistance in my dissertation study. My study will focus on Advanced Placement teachers of racially, culturally, ethnically, and/or linguistically diverse students who have been successful on the AP end-of-course exam (earning a score of 3 or higher). I am contacting you today because APS data indicates that you are a teacher who meets this description. Through this study, I am hoping to better understand the characteristics of exemplary teachers such as you so that we, as a community of educators, can better help diverse students succeed in Advanced Placement classes. Your help in this endeavor is vital.

The project consists of two or three classroom observations (at your convenience) and a 45-60-minute interview. The interview would be recorded for purposes of accuracy. Your identity and place of employment will remain confidential and you would have the option of withdrawing from the study at any time. This study has been approved by the Institutional Review Board at George Mason University and Arlington County Public Schools.
May I schedule a time to talk with you about this project?

Sincerely,

Tracy Maguire
tmiller4@gmu.edu
Appendix D

Interview Protocol

Written Response Demographic Questions

1. AP Course(s) taught ____________________________________________

2. a. How many years have you been teaching (total)? ____________
   b. How many years have you been teaching Advanced Placement?__________

3. How would you describe your race/ethnicity? _______________________________

4. Do you speak a second language fluently?  Yes   No    If yes, which one?_____________

5. a. From where did you earn your teaching degree?

___________________________________

   b. Do you have Masters degree? Yes   No   If yes, from where?

_________________________

   c. Are you a National Board Certified Teacher?  Yes   No

Teacher Interview Protocol
(Adapted from Ladson-Billings, 2009)

1. Tell me about your background as a teacher. Why did you go into teaching? When and where did you start teaching?

2. How would you describe your philosophy of teaching?

3. What are the biggest challenges to teaching AP level courses?
4. Now I’d like to focus specifically on the students in your AP classes who are racially, culturally, linguistically, and/or ethnically diverse (we’ll call the RCLED students for short). How do you know what “works” with AP RCLED students? Can you give me any concrete examples of how you know this works with AP RCLED students?

3. Can you think of any characteristics that RCLED students bring to the AP classroom which might differentiate them from their White peers?

4. What kinds of things have you done in your classroom that have facilitated success for your AP RCLED students?

5. Now I’d like to focus on your professional development experiences related to Advanced Placement teaching and students.

   a. What kinds of PD related to AP have you experienced that has influenced your teaching AP?

   b. Have you had any professional development experiences that have influenced your teaching for AP RCLED students, in particular? If so, please explain.

6. If you could tell the College Board anything about helping RCLED students be successful in AP classes (and on AP exams) what would it be?

8. How do you think the AP experience for your RCLED students compares to the AP experience of White students?

7. How do you handle the possible mismatch between your RCLED students’ cultures and your own or that of the other students in your AP class?

9. Is there anything else you’d like to add before we go on to the second part of the interview?
Say, “Now I’d like to ask a few questions about your communication with families.”

Family Collaboration Teacher Interview
(Adapted from Powell, Cantrell, Correll, Malo-Juvera, 2014)

(NOTE: This interview accompanies the CRIOP assessment instrument)

1. Please tell me about the conversations you have had with the parents/caregivers of your AP RCLED students. Where did these meetings occur? What did you learn from those conversations?

2. Can you give me some examples of how you’ve used the knowledge you’ve acquired from parents/caregivers to enhance student learning and/or classroom instruction for your AP RCLED students?

3. What methods do you typically use to communicate with parents/caregivers of AP RCLED students? How often does this communication occur? Please describe all of the methods you use (notes home, phone calls, home visits, social events, parent workshops, etc.)

4. If you have conducted home visits, what is the purpose for the visits? What information do you gather? How do you use that information?

5. Do parents/caregivers of RCLED students participate in classroom activities and events? If yes, describe how they participate.

6. What else can you tell me about how you work with the families of the RCLED students in your class?
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Biography

Tracy Miller Maguire graduated from Chenango Valley High School, Binghamton, New York, in 1989. She received her Bachelor of Arts from The George Washington University in 1993, her Master of Education from The George Washington University in 1994, and her Master of Arts in Teaching from George Mason University in 1999. She achieved National Board for Professional Teaching Standards certification in 2008. She has been an ESOL and English teacher in Arlington County, Virginia for 22 years.