WRITING RAPS TO IMPROVE VOCABULARY: AN EMPIRICAL STUDY ON A

CULTURALLY-RELEVANT INSTRUCTIONAL METHOD

A DISSERTATION

SUBMITTED TO THE FACULTY

OF

THE GRADUATE SCHOOL OF APPLIED AND PROFESSIONAL PSYCHOLOGY

OF

RUTGERS,

THE STATE UNIVERSITY OF NEW JERSEY

BY

NADINE O'REILLY

IN PARTIAL FULFILLMENT OF THE

REQUIREMENTS FOR THE DEGREE

OF

DOCTOR OF PSYCHOLOGY

NEW BRUNSWICK, NEW JERSEY   OCTOBER 2011

APPROVED: _____
                   Karen L. Haboush, Psy.D.

                   _____
                   Kenneth Schneider, Ph.D.

DEAN: _____
                   Stanley Messer, Ph.D.

ABSTRACT

The achievement gap between African-American and White students "remains a defining mark in racial inequality in public education today" (Hallinan, 2001, p. 51). Various explanations exist, with some implicating the misalignment between instruction and student's culture as contributing to school failure. Culturally-responsive pedagogy (CRP) emphasizes the importance of making "classroom instruction more consistent with the cultural orientations of ethnically diverse students" to validate and empower marginalized students in public schools (Gay, 2010, p. 31). Various approaches to CRP exist but the premise is that marginalized students will succeed academically when their interests and cultures are validated (Gay, 2010). Empirical evidence for CRP exists but is limited in regards to vocabulary acquisition; vocabulary is important because it is one of the core components of literacy (Sanacore & Palumbo, 2010). Drawing upon existing ethnographic and empirical research on CRP, this dissertation investigated whether instruction that incorporates youth's affiliation with hip-hop culture can facilitate word learning among a sample of 48 African American, low-income students enrolled in grades six through eight in an urban charter school in New Jersey. Hip-hop was selected because it has been validated as "the representative voice of urban youth" (Morrell & Duncan-Andrade, 2002, p. 88). It was hypothesized that students who created lyrical raps would (1) acquire and (2) retain a greater number of word definitions than students who were exposed to novel words during instruction involving rote memorization alone. A post-test analysis of variance (ANOVA) suggested no meaningful difference between the two groups for vocabulary acquisition and the first hypothesis was rejected. A second post-test ANOVA revealed a meaningful difference between the two groups for

vocabulary retention and the second hypothesis was confirmed. Results suggested that traditional instruction can be effective for short-term vocabulary learning but CRP is more likely to facilitate meaningful learning, that is, retention. Suggestions for future research include extending the current study to a more diverse sample, as well as designing hip-hop based instruction for core curriculum subjects. Suggestions for professional practice include creating community-based programs, such as urban debate teams, to encourage marginalized students to engage in critical thinking exercises while building and strengthening vocabulary knowledge.

ACKNOWLEDGMENTS

This dissertation would not have been possible without the help and encouragement of so many people. Words often fail me, so I will keep this section short and sweet. I hope each of you knows how wonderful you really are.

To Sylvia Krieger, thank you. The road to this defense was wrought with obstacles, but knowing I had you in my corner was a comfort. You are wonderful.

To Dr. Karen Haboush, you are professionalism incarnate. You gave me structure and feedback that far exceeded what I could have hoped for, and to which I owe the honor of this graduate degree. I have no doubt that, as a result of taking on the responsibilities that came with overseeing this dissertation, you had no choice but to turn down more enjoyable and rewarding work. Thank you for coming to my rescue; I could not have done this without you.

To Dr. Kenneth Schneider, you were still in full force as Chairman of the Department of Applied Psychology at GSAPP when this dissertation was started so many years ago. I am so grateful to have connected with you before your retirement and equally thankful for your commitment to seeing me through to my defense. Your knowledge of statistical methods was critical to this dissertation. Your kind words and gentle encouragement were the threads that kept my self-esteem from unraveling.

To my family, thank you. I do believe that I'm the luckiest girl alive.

Mom, you are wise beyond belief. I will never meet a smarter, stronger, more courageous woman for as long as I live. I wish I were half the woman you are. I love you.

Papa, I know you are smiling in Heaven and that you are proud of me. My only regret is that I wasn't able to finish this sooner. I love you. All I ever did, I did for you.

Dianne, my sister, because you are a woman of few words our conversations have meant that much more. You speak the truth. Thank you for getting angry with me when I wanted to quit. Thank you for never letting me off the hook, and for believing in me.

To Brendan, my husband, thank you. You will never know just how pivotal you were to my success. Thank you for all that you've done to encourage me to finish.

To my son, Brendan Alexander, to whom this dissertation is dedicated, thank you. I am the luckiest mother in the world. You are so intuitive; somehow, *you just know*. Often, before even I realized how stressed I was, you took on the role of babysitter, motivator, and researcher because you wanted to see mommy succeed. I still have every note of encouragement you slipped underneath my office door while I was buried in my work. I can't believe you are only 9 years old. I love you so much. You will always be my "son-shine."

To my son, Jonathan, thank you. You didn't ask to be born in the midst of a dissertation hailstorm, but you've weathered it beautifully. You donated so much of your time with me to this process. I promise I will make it up to you. Thank you for forcing me to literally stop and smell the flowers.

Finally, who is a girl if she doesn't have friends? Maria, Rossana, Sonia, Sandra, and Melissa, thank you. I love the laughter and genuine comfort that comes with being a part of your lives.

LIST OF TABLES

LIST OF FIGURES

TABLE OF CONTENTS

CHAPTER I

Introduction

"'Failure' is too often not due to lack of ability or interest from students, but the school

system's failure to make it valuable to them" (Mercadal-Sabbagh, n.d., p. 9).

Background of the Problem

African-American children from high-poverty urban school districts continue to

struggle to demonstrate their academic potential in school (Bruce, Getch, & Ziomek-

Daigle, 2009; Cartledge & Kourea, 2008; Moore Iii, Ford, & Milner, 2005; Ntiri, 2009).

Education reform efforts have aimed to eliminate the disparity in achievement rates

between African-American and White students for decades, beginning with the

Elementary and Secondary Education Act of 1965 and including the recent No Child Left

Behind Act of 2001 (Diorio, 2008). Nevertheless, African-American children continue to

lag behind their White cohorts on measures of literacy (Vaughn, Cirino, Wanzek, Wexler,

Fletcher, Denton, Barth, Romain, & Francis, 2010), math (Keck-Staley, 2010), social

studies (White & McCormack, 2006), and science (Zirkel, 2005). Aggregated data

indicate that African-American students are, on average, four grade levels below their

White peers in academic knowledge, and that only one out of four African-American

students in grades 4, 8, and 12 is achieving above the most basic level of proficiency on

standardized measures (Vanneman, Hamilton, Baldwin, & Rahman, 2009).

Approximately 60 percent of African-American students graduated from high school in

2006 (Stillwell, 2009). Of those who go on to college, less than 10 percent of African-

Americans graduate (Balfanz, 2009).

Much of the extant research focuses on external factors over which most African-American students have little control in order to shed light on the reasons behind their academic difficulties. Research in this vein has examined the undeniable impact on learning of low socioeconomic background (Cartledge & Kourea, 2008; Patterson, Hale, & Stessman, 2007; Shiller, 2009; Tickner, 2008), single-parent households (Hammer, Farkas, & Maczuga, 2010; Somers, Owens, & Piliawsky, 2008; Stewart, 2007), difficulty accessing positive role models (Somers, Owens, & Piliawsky, 2009), inadequate healthcare and the deleterious biological effects of exposure to environmental toxins, such as lead and asbestos (Hall, 2007; McNeese-Ward, 2010; Vaughn et al., 2010), and the longstanding effects of racism (Dotterer, McHale, & Crouter, 2009; Hyland, 2005; Zirkel, 2005), which includes a lack of consideration of students' cultures in elementary and secondary school curricula (Brown, 2007; Cartledge & Kourea, 2008; Ford & Kea, 2009; Love & Kruger, 2005; Monroe, 2005). This list is not exhaustive, and a detailed discussion of each is beyond the scope of the current study. However, an introduction to the most salient issues in the scholarly research, many of which overlap, is warranted and therefore presented herein.

The Impact of Poverty and Racially-Segregated Schooling

An association among racial phenotype, socioeconomic status, and quality of education has been established in the literature on segregated schooling (Orfield & Lee, 2007). In the 1954 landmark case Brown v. Board of Education, the United States Supreme Court ruled that "separate but equal" schooling was unconstitutional (McGrane, 2004). Yet, African-American students today continue to attend "intensely segregated" schools where the student population is more than 75 percent Black (Kozol, 2005;

Orfield & Lee, 2007). These schools are likely to be located in high-poverty, high-crime, densely populated areas commonly referred to as "inner cities" (Lynn, Benigno, Williams, Park, & Mitchell, 2006). Schools in these areas typically lack adequate physical and human resources. Dilapidated structures, outdated texts, limited technology, and fewer experienced teachers and staff than schools in middle- and upper-income districts are common (Balfanz, 2009; Kozol, 2005; 1991). The Alliance for Excellent Education (2008) reported in their study of segregated schools, "Black students were more likely than white students to attend schools where trash was present on the floor (29% vs. 18%), graffiti was present (10% vs. 3%), and ceilings were in disrepair (12% vs. 7%)." African-American students attending schools under these conditions receive the implicit message that their education is unimportant (Kozol, 2005).

The correlation between racial segregation and poverty is underscored by the finding that in schools where African-Americans comprise less than 10 percent of the total student body, less than 18 percent are likely to be from low-income backgrounds (Orfield & Lee, 2007). In contrast, approximately 80 percent of intensely segregated schools are responsible for educating predominately poor, African-American students, with nearly half being eligible for free- or reduced-lunch (Somers et al., 2008). Kozol (2005) found that among the intensely-segregated, high-poverty districts he studied, dropout rates exceeded 40 percent for students between ninth and eleventh grades.

Dropout Rates

The impact of school failure is evident in that African-American students in grades 7 through 12 drop out of school at disproportionately high rates among students of all racial backgrounds (Bowers, 2010; Patterson et al., 2007; Somers et al., 2009). Indeed,

it is estimated that of the national average of 71 percent of total high school graduates, less than half are of African-American descent (Balfanz & Legters, 2004). Poverty and dropout rates appear to be inextricably linked. Balfanz and Legters (2004) reported, "A majority minority high school is five times more likely to have weak promoting power (promote 50% or fewer freshmen to senior status on time) than a majority white school" (p. v). However, when majority minority high schools are equitably funded and enjoy more resources, the rate of graduation is equal to that of majority White schools (Balfanz & Legters, 2004).

Racially-segregated schools appear to be another contributing factor to the disproportionately high drop out rate of African-American students. Currently, there are approximately two thousand documented high schools that account for more than half of the national percentage of dropouts (Alliance for Excellent Education, 2008). These high schools are referred to in the literature as "dropout factories" (Balfanz, 2009; Balfanz & Legters, 2004). In 2004 these "dropout factories," most of which are in urban settings and predominately attended by students of color, graduated less than 60 percent of students who had enrolled in the ninth grade (Balfanz, 2009).

Concentrated efforts must be made to ensure that disaffected and marginalized students stay in school. Proponents of the recent No Child Left Behind Act of 2002 have argued that enhancing schools' accountability ensures that high-stakes data are available to guide instructional decisions and consequently, that students in failing schools will receive more instructional time in core curriculum areas (Kaniuka, 2009). NCLB proposes to equalize the educational opportunities of the disadvantaged and the

privileged so that 100 percent of American students will be proficient in the areas of reading, writing, mathematics, and science by the year 2014 (NCLB, 2001).

Critics of NCLB argue that its emphasis on high-stakes testing may exacerbate the existing achievement gap between African-American and White students (Neil, 2004; Peterson & West, 2003). Because NCLB measures schools' effectiveness by the standardized test scores of their students, an increase in the delivery of rote-oriented instruction has all but replaced the content-rich teaching necessary in many urban schools (Lane, 2006; Noguera, 2007). Kozol (2005), in observing predominantly Black and Latino public schools in New York City, reported on the manner in which classroom instruction has been stripped of spontaneity and replaced with rote-drill instruction in preparation for high-stakes testing. Mechanized, "Skinnerian" interactions between teachers and students were the norm, and verbal communications were all but replaced with a code of silent signals to which students were expected to respond (Kozol, 2005). Such methods have often been criticized for failing to meaningfully engage African-American youth, and may inadvertently serve to dehumanize the urban student. Indeed, one teacher stated about the behavioral techniques she utilized in her classroom, "I can do this with my dog" Kozol, 2005, p. 49). The manner in which instruction is delivered to African-American students is worth revisiting. Standardized tests can neither control for factors such as race, socioeconomic background, and the longstanding effects of institutional racism (Noguera, 2003), nor assess the rich cultural knowledge of African-American students (Howard, 2010).

Overrepresentation in Special Education

African-American children continue to be over-represented in special education placement settings (Duren Green, 2005; Monroe, 2005; Vallas, 2009). Currently, it is estimated that 14% of African-American students are classified as eligible for special education services (Duren-Green, 2005). Moreover, research suggests that African-American students in special education are three times more likely to be found eligible for special services under the category of Cognitive Impairment (CI), twice as likely to be classified Emotionally Disturbed (ED), and 1.3 times more likely than their White special education peers to be classified with a Specific Learning Disability (SLD) (Council for Exceptional Children, 2002). Once classified, African-Americans are more likely to be isolated from both general education peers and non-minority special education cohorts, as data suggests that only 37 percent of African-American special education students (compared to 55% of White classified students) are placed in inclusive classrooms (Council for Exceptional Children, 2002). Isolation from mainstream peers has been linked to a host of negative outcomes, including decreased feelings of school belonging that can lead to academic disengagement and low academic confidence (Pershey, 2010; Uwah, McMahon, & Furlow, 2008). Restrictive special education placement has long-term consequences as well, including a decreased likelihood that the student will graduate from high school, access college-level education, find employment, and become financially-independent (McKinney, Bartholomew, & Gray, 2010).

Underrepresentation in Gifted and Talented Programs

In contrast to the abundance of research available on African-American students in special education, there is a dearth of literature on gifted African-American students

(Ford et al., 2002). Statistics are scarce in this area; however, the National Center for Education Statistics reported that, overall, African-American students are three times less likely than their White peers to be represented in gifted education programs (n.d.). Explanations for the disparity include low teacher expectations and self-limiting behaviors, such as rejecting advanced courses for fear of social isolation (Graham & Anderson, 2008; Henfield, Moore iii, & Wood, 2008; Hopkins & Garrett, 2010) or of being perceived by their peers as going against the grain of their culture by pursuing academic excellence (Ogbu, 1994). Others argue that the standardized tests commonly used to determine eligibility for gifted programs fail to sample the culturally-rich knowledge of African-American students and limit their likelihood of placing into such programs (Banks, 2006; Boaler, 2003; Crain, 2004; Skiba, Knesting, & Bush, 2002; Skiba et al., 2008; Vallas, 2009). However, in a cross-racial analysis of content bias for five major intelligence scales, Reynolds and Kamphaus (2003) asserted, "No consistent evidence of bias in construct validity has been found with any of the many tests investigated" and "tests measure the same construct with equivalent accuracy for blacks, whites, Mexican Americans, and other American minorities of both sexes and at all SES levels" (p. 546).

Features of Successful Urban Classrooms

A school system is a powerfully influential environment on children, second only to that of the immediate family (Bronfenbrenner & Morris, 2006). The degree to which students feel academically competent can affect their ability to learn (Murray, Waas, & Murray, 2008). For teachers of urban, African-American youth, creating a classroom environment that communicates trust, respect, and authentic caring can lead to stronger

student-teacher relationships and increase the degree to which students feel capable of learning (Murray & Greenberg, 2001). Successful urban classrooms are typically those where teachers acknowledge the cultural differences that exist between students and themselves, curricular activities are aligned with students' cultures, and students are encouraged and expected to succeed (Love & Kruger, 2005; Somers et al., 2008; Walker-Dalhouse & Risko, 2008; Wiggan, 2008). African-American students respond favorably to classes taught by teachers with whom they have developed a trusting relationship (Gregory & Ripski, 2008). Often, that relationship is predicated on whether they believe that their teacher authentically cares about them as individuals (Gregory & Ripski, 2008) and recognizes the added value that their culture lends to instruction (Somers et al., 2008).

The academic achievement of African-American, urban youth is a complex, multilayered topic influenced by many variables. Instructional strategies comprise only one such area. Nonetheless, the literature has suggested that minority students can respond favorably to pedagogy that incorporates and validates their cultural backgrounds (Brown, 2007; Cartledge & Kourea, 2008; Ford & Kea, 2009; Howard, 2003; Hyland, 2005; Morton & Bennett, 2010; Parsons & Travis, 2005). One example involves African-American students interviewing family members about their history and creating essays that examine how race has affected them personally (Villegas & Lucas, 2002). Another example involves highlighting the seminal contributions of African-Americans, for example, to the field of math and science (Keck-Staley, 2010; Russell, 2005). Therefore, one possible approach to promoting academic success among African-American youth may be to create classroom environments which incorporate students' culture into the

curriculum. Instruction that incorporates the culture of students is termed culturally-relevant instruction (Brown, 2007; Ford & Kea, 2009; Howard, 2003) as described below.

The Importance of Culturally-Relevant Instruction

Students cannot leave their life experience at the door when they come to school. They bring these experiences with them to the classroom; to ignore the collective impact these experiences have on urban students' learning experiences is to miss a potential opportunity to meaningfully engage students. While teachers may be unable to influence what occurs outside of school, they are able to develop instructional strategies that may enhance student's engagement in the learning process. Urban teachers of African-American students in particular, face the formidable task of teaching rigorous content-based curricula in a manner consistent with students' cultures and interests (Brown, 2007; Ford & Kea, 2009; Hyland, 2005; Lane, 2006; Monroe, 2005; Parsons & Travis, 2005). Instruction that utilizes students' real-world experiences as pedagogical tools is typically known as culturally-relevant, or culturally-responsive pedagogy (Lane, 2006). The terms are used interchangeably hereafter.

Culturally-responsive pedagogy is, in essence, teaching that incorporates the beliefs, customs, and cultural backgrounds of minority students (Gay, 2010). Those who practice culturally-responsive pedagogy consider students' culture a key component to authentic learning (Gay, 2010). Specifically, "culturally responsive pedagogy assumes that if teachers are able to make connections between the cultural knowledge, beliefs, and practices that students bring from home, and the content and pedagogy that they use in

their classrooms, the academic performance and overall schooling experiences of learners from culturally diverse groups will improve" (Howard, 2010, p. 69).

Culture is most commonly defined as a set of norms, values, beliefs, behaviors, and ways of knowing that influence the way individuals react to their environment (Trumbull, 2001). While race can be a major cultural factor, factors such as age, socioeconomic status, geographical location, and language each play a central part in defining one's culture (Howard, 2010). Though cultural identity is inextricably linked to sense of self (Milner, 2006), many African-American children attend schools that delegitimize their culture (Smith & Smith, 2009; Wiggan, 2008) and frown upon the manner in which they express their cultural affiliation (i.e., their attire, or their use of language) (Hall, 2007; Taylor & Taylor, 2007). For many African-American students, that affiliation has been dubbed "hip-hop culture" (Alridge, 2005; Alridge & Stewart, 2005; Dagbovie, 2005; Taylor & Taylor, 2007; Tickner, 2008). Members of hip-hop culture are bound by a distinct ethos that includes fashion (i.e., sagging pants), slang, and musical preference (Jackson & Anderson, 2009). Perhaps as a result of hip-hop's widespread popularity, researchers in the area of culturally-responsive pedagogy are turning their attention to investigating how the incorporation of hip-hop and its components (i.e., rap music) in curricula can help to enhance academic achievement among African-American urban students (Alridge, 2005; Forell, 2006; Gonzalez & Hayes, 2009; Jackson & Anderson, 2009; Kirkland, 2008; Metro-Roland, 2010; Newman, 2005; Pardue, 2007; Prier & Beachum, 2008; Sánchez, 2010; Weinstein, 2006).

Hip-Hop and Rap Music as Culturally-Responsive Pedagogies

Hip-hop is believed to have originated in the early 1970's in South Bronx, New York (Alridge & Stewart, 2005). Via creative expression in the form of deejaying, break dancing, art (graffiti), and emceeing (rapping), urban youth of the time gave voice to their discontent with societal ills that included joblessness, the growing presence of gangs, weapons and illegal drugs, and a lack of quality community programs (Akom, 2009). Since the 1970's, hip-hop has grown to become an influential cultural movement that crosses geographical, racial, and socioeconomic divides (Akom, 2009). Indeed, the elements of hip-hop converge to create a culture, and youth who embrace those ideals are considered members of "hip-hop culture" (Taylor & Taylor, 2007).

Though many have criticized hip-hop music as a vehicle for promoting violence and drug use, others extol the virtues of the genre as "prophetic, empowering, and full of educational potential" (Ginwright, 2004). By bringing hip-hop into the classroom, the urban teacher incorporates the student's culture and validates the student's experiences (Ginwright, 2004). Dance, music, and wordplay are the essence of the hip-hop genre (Akom, 2009), and their relationship to learning has been investigated by scholars who have worked with African-American youth in school settings (Allen & Boykin, 1992; Allen & Butler, 1996; Boykin, 1982; Guttentag & Ross, 1972; Hanley, 1998). Allen and Boykin (1992) studied the effects of music and movement on a task of analogies with low-income elementary school students of European-American, and African-American backgrounds. They found that when tasks were accompanied by music, movement, and rhythmical clapping, African-American students outperformed their European-American peers (Allen & Boykin, 1992). Though anecdotal in nature, Gay (2010) reported on a

middle school language arts teacher who incorporated rap music into a grammar lesson to find that all the students in the group learned the parts of speech with 100% accuracy. Gay (2010) also described a middle school teacher who had his students physically represent the parts of fractions and, with movement, taught division with near perfect success.

While it may be unrealistic to expect teachers to design content lessons that allow students to dance, sing, and be creative and dramatic within the confines of the typical timeframe allotted for instruction (e.g., 40 minutes per subject), incorporating elements of creativity by tapping into students' rich cultural backgrounds warrants further investigation. As hip-hop is, at its core, a marriage of music and lyricism that is embraced by urban youth, the following section will discuss the implications of infusing music into classroom instruction.

Musical Elements as Precursors to Literacy

Language is not only a cognitive component of life, but also a musical one (Loewy, 2004). Before formal language is acquired, infants and toddlers use musical intonation to communicate with caregivers, whether with a shrill scream to indicate hunger or a soft murmur to indicate contentment (Chen-Hafteck, 1997). As language develops, children are introduced to songs and rhymes that serve to build their vocabulary and understanding of novel concepts (Gfeller, 1986). As children are introduced to musical elements, such as rhymes, rhythms, and repetitions, they begin to understand the sounds of language, which has been linked to the successful development of reading skills (Gfeller, 1986).

As Allen and Boykin's (1992) study on music and movement with African-American youth demonstrated, music has the potential to enhance literacy. Hip-hop music in particular holds promising implications for enhancing language, learning, and interest in curriculum (Weinstein, 2006). It can be infused into existing language-arts curricula to teach important subjects (Morrell & Duncan-Andrade, 2002). One such subject is vocabulary development, which has been linked to the development of core academic competencies, such as reading comprehension and written expression (Greenwood, 2010; Kelley, Lesaux, Kieffer, & Faller, 2010; McCollin, O'Shea, & McQuiston, 2010). The genre of hip-hop music and, in particular, rap music with its heavy emphasis on the art of storytelling by using rich vocabulary and clever, thought-provoking rhymes, may be an effective vehicle for providing culturally-relevant language arts instruction; in particular, in the area of vocabulary.

The Importance of Lifelong Vocabulary Development

Bruning, Schraw, and Ronning (1999) define vocabulary knowledge as "understanding words and knowing how to use them." Educators observe that vocabulary knowledge is directly linked to competence in many areas (Beck, McKeown, & Kucan, 2002; Biemiller, 2001). Vocabulary knowledge is also linked to reading comprehension (Neuman & Dwyer, 2009), and improved quality of writing (Bauman & Graves, 2010). Numerous researchers have reported that students with expansive vocabularies process cognitive information fluently, and express their ideas in speaking and writing more precisely than students with less proficient vocabularies, all of which is integral to academic achievement (Benner et. al., 2005; Justice et al., 2010). Vocabulary is a critical component of literacy; students who lack vocabulary knowledge will struggle to

comprehend academic subject matter and demonstrate the academic proficiency required to complete formal schooling (Kelley et al., 2010; Lovelace & Stewart, 2009; Sanacore & Palumbo, 2010).

According to Wren (n.d.), the estimated working vocabulary of the average first grade student is somewhere between 2,500 to 5,000 words, and whether the student is at the lower or higher end of this range is largely dependent upon the skills they had acquired prior to entering first grade. As it stands, those students whose fund of vocabulary can be classified as being in the lower end of the range are at a clear disadvantage relative to their counterparts who have acquired double the number of vocabulary words in the same amount of time. Over time, the gap becomes more pronounced, and less easily bridged (White, Graves & Slater, 1990). By the time the average native English speaker graduates from high school, he or she has acquired a vocabulary of approximately 40,000 unique words (D'Anna, Zechmeister, & Hall, 1991). In stark contrast, those students who entered school with significantly less well developed skills are expected to graduate with more limited vocabularies estimated to be within 5,000 to 17,000 words (D'Anna, Zechmeister & Hall, 1991).

Many studies focus on either "how" or "what" causes vocabulary gains but do not investigate equally important alternative methods of instruction that may lead to greater vocabulary gains (Neuman & Dwyer, 2010). Students entering school at a vocabulary disadvantage will struggle considerably with vocabulary growth if not taught in a manner meaningful enough for them to invest the time and effort to commit new words to memory, or to thoroughly learn them (White, Graves & Slater, 1990). Failure to learn vocabulary contributes to reading and communication difficulties (Greenwood, 2010;

Ruston & Schwanenflugel, 2010; Terry, Connor, Thomas-Tate, & Love, 2010). As the process of vocabulary acquisition is complex, a greater understanding of what may work to enhance the process is warranted.

There is a consensus among researchers that to masterfully "know" a word's meaning, a person must understand the concept behind the word (Lovelace & Stewart, 2009; Phillips, Foote, & Harper, 2008). Nagy and Scott (2000) assert that acquisition of new vocabulary accrues slowly throughout the course of one's life, mostly through contextual interaction with novel concepts. Each time a new word is encountered, it is placed into context with existing knowledge. In turn, the acquisition of the word's meaning is established and the potential for long-term retention is increased. As such, contextual vocabulary instruction has the potential to be a powerful educational technique.

Statement of Purpose and Rationale

While each component of hip-hop culture has its place in pedagogy (i.e., graffiti as art therapy or fashion as a design project) this dissertation will focus on the element of rapping. It will investigate whether the art of lyrical construction can encourage vocabulary development among African-American, urban students who identify with hip-hop. Because vocabulary development is considered a crucial component of literacy (Borgia, 2009; Hammer et al., 2010; Heilmann, Miller, Nockerts, & Dunaway, 2010; Justice et al., 2010; Lovelace & Stewart, 2009; Ruston & Schwanenflugel, 2010; Terry et al., 2010; Vaughn et al., 2010; Yeh & Connell, 2008), and rapping relies heavily on the clever use of metaphors and vocabulary, the current study seeks to expand the existing literature base on culturally-responsive instruction by examining the effectiveness of

incorporating rap music and creative expression into a vocabulary-building lesson for

African-American middle school students in a large urban district in New Jersey.

Chapter II

Literature Review

Theoretical Framework for the Study

      With its focus on validating the cultural language of students of color and emphasis on improving instruction for African-American and low-income students who have historically been denied access to educational equality, culturally-responsive pedagogy has paved the way for educators to infuse popular culture into academic subjects (Ford & Kea, 2009). At present, the popular culture of African American youth is hip-hop (Alridge & Stewart, 2005; Dagbovie, 2005; Jackson & Anderson, 2009; Kirkland, 2008). This dissertation is rooted within the framework of culturally-responsive pedagogy. Conceptually, culturally-responsive pedagogy emphasizes the importance of making "classroom instruction more consistent with the cultural orientations of ethnically diverse students" to validate and empower those who have a history of marginalization in public schools (Gay, 2010, p. 31). Culturally-responsive pedagogy recognizes the untapped potential of the "out-of-school" strengths and skills of culturally-diverse students, such as recreational rapping, and encourages the incorporation of such skills into core subject lessons (i.e., using verbal creativity to scaffold written expression skills) (Gay, 2010). Drawing upon existing ethnographic and empirical research on culturally-responsive pedagogy and hip-hop culture, this dissertation investigates whether instruction that incorporates African-American youth's affiliation with hip-hop culture (Stovall, 2006; Taylor & Taylor, 2007) can facilitate word learning among African American students. It was hypothesized that sixth-, seventh-, and eighth-grade students who used newly learned vocabulary words to create original lyrical raps would acquire

and retain a greater number of word definitions than students who were exposed to novel words during direct instruction alone.

Admittedly, an extensive number of topics related to the current status of African American students' educational achievement warrant investigation. This is a complex issue that cannot be exhaustively explored within the confines of a single dissertation. Therefore, this literature review focuses on the issues that are most salient to this study's focus on culturally-responsive rap-based instruction. The following literature review begins with an overview of the current status of academic achievement of African American students, including discussion of the implications of the No Child Left Behind Act of 2002. A review of statistical data and narrative information on literacy and African American students is then followed by an introduction to the guiding framework for this study, culturally-responsive pedagogy (Gay, 2010) and the theories that helped shape it. The argument for a broader view of culture is presented in order to introduce the validity of hip-hop as pedagogical tool; this is followed by a review of relevant empirical and qualitative research on rap- and hip-hop-based instruction. Finally, as this dissertation was designed to evaluate the effectiveness of a classroom-based rap-focused vocabulary lesson, the importance of vocabulary in predicting academic achievement and enhancing academic engagement and the effects of different instructional methods are reviewed.

Review of the Literature

Current Trends in the Education of African American Students

The existence of an "achievement gap" between African-American and White students despite decades of education reform "remains a defining mark in racial inequality in public education today" (Hallinan, 2001, p. 51). The term "achievement

gap" refers to the disparate academic achievement between groups of students based on indicators such as graduation rates and differences in scores on standardized tests (Gay, 2007). The achievement gap between low-income and middle-to-upper-income groups, and between racial groups, especially African American and White students, has been the subject of decades of research and education reform efforts, beginning with the Elementary and Secondary Education Act of 1965 and continuing with the No Child Left Behind Act of 2002 (NCLB) (Diorio, 2008). No Child Left Behind aims to equalize educational opportunities for all school-age children "with accountability, flexibility, and choice so no child is left behind" by ensuring that students of all racial, ethnic, and socioeconomic backgrounds are proficient in literacy, numeracy, and science by 2014 (Executive Summary of NCLB, 2004). High-stakes standardized testing scores are used to determine whether schools are meeting "Adequate Yearly Progress" (AYP) goals, or benchmarks.

Results of standardized tests of reading and math achievement administered throughout the United States by the National Association of Educational Progress (NAEP), demonstrate that significant differences between African American and White students in the areas of general academic achievement persist (NAEP, 2010). The NAEP data are based upon uniform tests of achievement administered to large samples (approximately 180,000 fourth graders and 147,000 eighth graders took the assessment in 2007) that are representative of "each of the 50 states, the District of Columbia, and The Department of Defense school system, and allow examination of the achievement gaps for public school students for individual states as well as for the nation as a whole" (Vanneman, Hamilton, Baldwin Anderson, & Rahman, 2009, p.3).

As part of No Child Left Behind, three levels of achievement exist: Basic, Proficient, and Advanced. Students performing at the Basic level demonstrate "partial mastery of prerequisite knowledge and skills that are fundamental for proficient work;" students performing at the Proficient level demonstrate "competency over challenging subject matter, including subject-matter knowledge, application of such knowledge to real-world situations, and analytical skills appropriate to the subject matter;" and those who score in the Advanced range have superior skills in the subject area assessed (National Assessment of Educational Progress). The following statistics, compiled by the United States Department of Education (USDOE) from NAEP data for the 2008-2009 school year, reflect the current achievement gap between African American (classified as "Black") and White students.

- On a measure of reading achievement, 77% of White fourth-grade students and 83% of White eighth-grade students scored in the Basic range of proficiency, compared to 47% and 56% of Black students in the same grades;

- On the same measure of reading achievement, 41% of White fourth-grade students and 39% of White eighth-grade students scored in the Proficient range, compared to 15% and 13% of Black students in the same grades;

- On a measure of math achievement, 90% of White fourth-grade students and 82% of White eighth-grade students scored in the Basic range of proficiency, compared to 63% and 49% of Black students in the same grades;

- On the same measure of math achievement, 50% of White fourth-grade students and 43% of White eighth-grade students scored in the Proficient range, compared to 15% and 12% of Black students in the same grades

These results suggest that the intent of No Child Left Behind to ensure proficiency for all children in the areas of math, reading, and science by the year 2014 (NCLB, 2001) has not yielded the intended significant educational benefit for African American students. As revealed in Figures 1 through 4, most African American students have not made significant gains in national reading and math achievement test scores since the implementation of NCLB's standards-based education model. The achievement gap between Black and White students was narrowest in 2007 than in previous years (Vanneman, Hamilton, Anderson, & Rahman, 2009). However, on average, Black students scored 26 points fewer than White students on national reading and mathematics assessments in 2007 (Vanneman et. al., 2009). If the current trend continues, the achievement gap will not close by 2014 (Lee, 2006).

Figure 1
Average NAEP reading scores for Black and White public school students at grade 4:
Various years
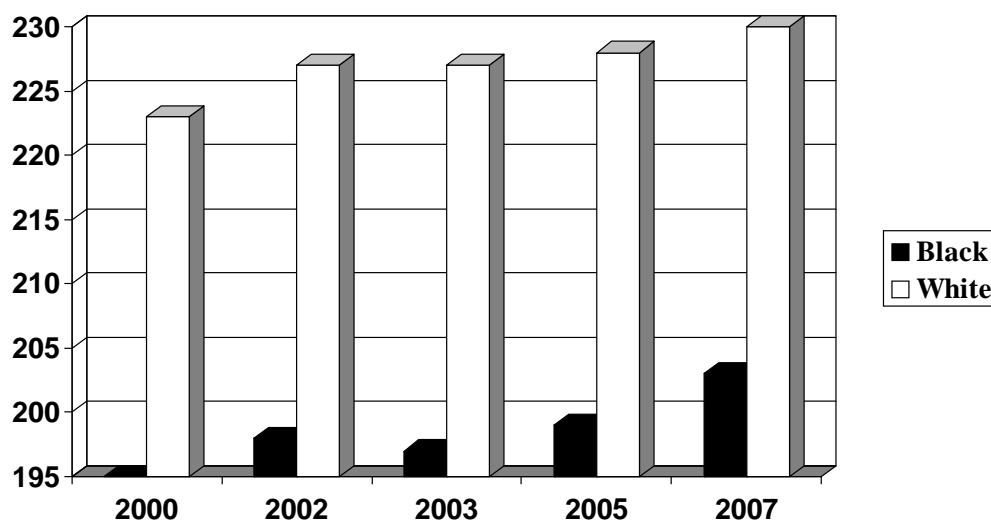
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education
Statistics, National Assessment of Educational Progress (NAEP), 2000–2007 Reading Assessments.

Figure 2
Average NAEP reading scores for Black and White public school students at grade 8:
Various years*

*Data not collected for grade 8 in 2000
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education
Statistics, National Assessment of Educational Progress (NAEP), 2002–2007 Reading Assessments.

Figure 3

Average NAEP mathematics scores for Black and White public school students at grade 4: Various years

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000–2007 Mathematics Assessments.
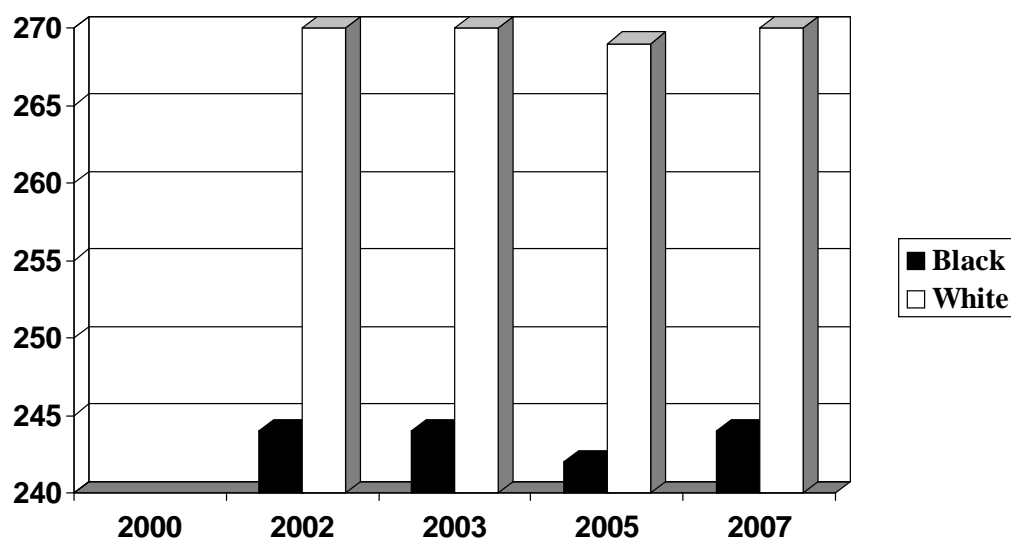
Figure 4

Average NAEP mathematics scores for Black and White public school students at grade 8: Various years
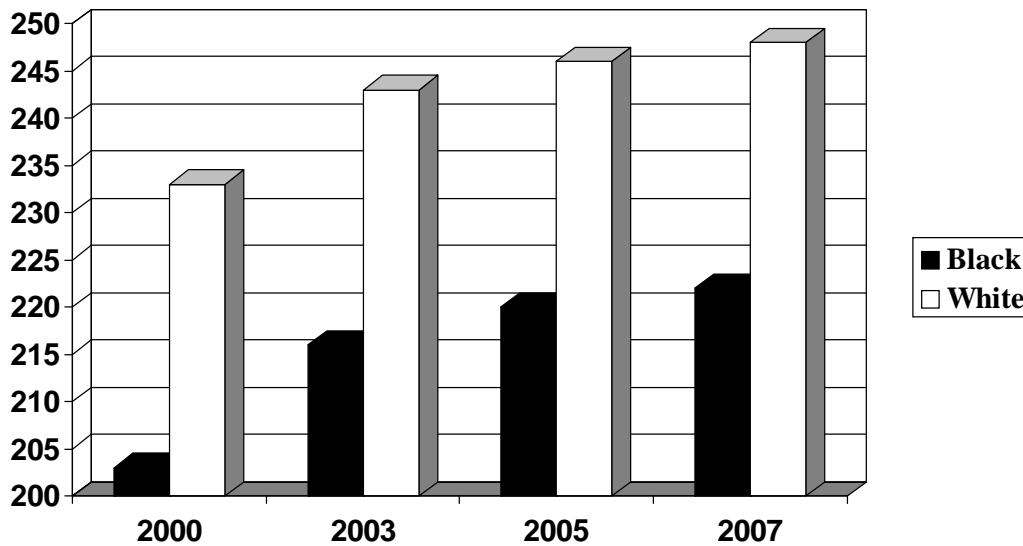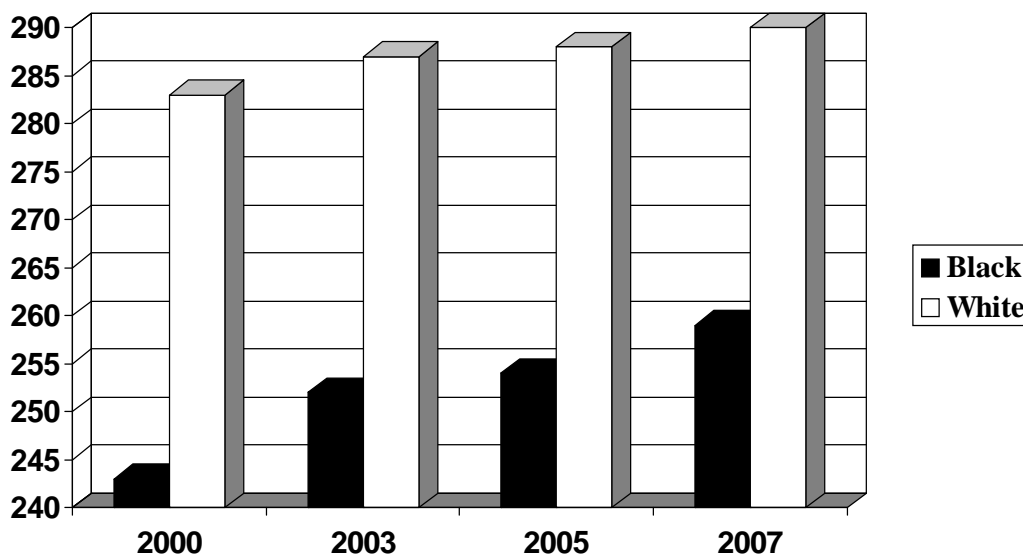

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000–2007 Mathematics Assessments.

Critics of the NAEP's standardized testing have questioned the validity of its results. For example, Gay (2010) suggested that the scores may be misleading because they are presented as averages, which precludes the ability to examine whether, and if so, to what extent within-group variability exists (i.e., do Black students of Haitian ethnicity perform differently than Black students of African descent). Also, the NAEP does not provide information on how performance is distributed by demographic factors, such as gender or socioeconomic background (Gay, 2010). Further, scores are presented as broad categories (i.e., reading and mathematics); a breakdown of the components tested (i.e., vocabulary, decoding, etc. for reading; calculation, fluency, etc. for mathematics) is nonexistent (Gay, 2010). Nevertheless, many critics of educational reform continue to suggest that national test scores reflect a longstanding lack of educational opportunities for African American students (Gay, 2007; Rovai, Jr, & Wighting, 2005).

The national data underscore the need for continued investigation on pedagogical practices that can yield measurable change in the overall academic achievement of African American students. Although various explanations have been offered for the continued Black-White gap in achievement test scores, culturally-responsive theorists have suggested that the introduction of NCLB's high-stakes testing mandate has further decreased urban teachers' opportunities to facilitate genuine learning for culturally-diverse, historically underserved populations and questioned the impact of standards-based instruction with marginalized populations (Townsend, 2002). Moreover, though significant changes have not been realized in either of the measured areas (i.e., math and reading), the data suggest that reading achievement is a particular struggle for African American students (NAEP, 2010). Reading achievement has been linked to overall

academic achievement; struggling readers face future academic difficulties and are at increased risk of grade retention, special education referral, and dropping out of school (Tatum, 2000).

Literacy and African-American Students

According to the National Association of Educational Progress (NAEP), literacy levels for African American students, as defined by standardized test scores, continue to lag significantly behind those of their White, middle-class peers (NAEP, 2010). In stark contrast to the 42% of White students who scored at or above levels of proficiency in reading achievement in 2009, only 16% of African American students nationwide were able to do so (NAEP, 2010). Unfortunately, data are presented in broad categories (i.e., reading). As such, an analysis of students' performance in the areas that contribute to literacy (i.e., vocabulary, comprehension) is not possible. However, it follows that, while standardized scores provide a picture of academic achievement, proponents of culturally-relevant instruction argue that they paint an incomplete picture of the intellectual potential of African American youth (Tatum, 2005). In fact, the validity of standardized assessment scores among minority students has been described as failing to reflect the breadth of contextual knowledge minority students possess (Townsend, 2002). Additionally, the rote, drill-and-repeat instruction intended to prepare students for standardized tests has been linked to academic disengagement (Crain, 2004) and hence the alarmingly low graduation rate of African-American students in low-income, urban settings, currently estimated to be less than half of the national average of 71 percent of total high school graduates (Editorial Projects in Education, 2008).

At present, students are deemed literate if they are able to read and write in academic English (Hammer et al., 2010; Justice et al., 2010) at grades 4, 8, and 12. Proponents of culturally-relevant instruction have argued that this definition of literacy serves to protect and preserve a power structure that has favored the White, middle class since the inception of colonial education (Tatum, 2000; Wickens & Sandlin, 2007). Research has indicated that the United States public school system has historically discouraged culturally-diverse students from expressing their knowledge in alternative ways by adopting a rigid, "one-size-fits-all" approach to teaching (Ford, Harris Iii, Tyson, & Trotman, 2002; McCollin et al., 2010). Institutional practices in schools lead African-American students to disengage from academic discourse by allowing little leeway for the integration of cultural diversity into the mainstream curricula (Dotterer et al., 2009; Hyland, 2005; Zirkel, 2005). Ogbu (1994) posited that it is common for African American students who attend schools that promote White, middle-class norms to deliberately underachieve in order to reject the mainstream academic culture's definition of success and avoid "acting White." Conversely, Horvat and Lewis (2003) challenged Ogbu's "acting White" theory. They argued that many African American students strive to succeed in school in order to counteract misconceptions about their intellectual capabilities (Horvat & Lewis, 2003).

The cumulative failure associated with the achievement gap is profound. When students consistently fail to experience success in school, their self-confidence diminishes and behaviors consistent with "learned helplessness" emerge (Gay, 2010). Struggling students begin to expect to fail and may avoid attempting new tasks altogether (Gay, 2010). Task-avoidance, often manifested through acting-out behaviors, may lead to

suspension and/or expulsion from school, and many low-achieving students will drop out of school before graduation. As the achievement gap between African-American and White students remains on the forefront of contemporary educational research, it is clear that teachers of African-American students in low-performing districts must seek out innovative approaches to literacy instruction. Forell (2006) suggests that in order to do so, literacy should first be conceptually redefined to include not only reading and writing skills, but also creative ways of knowing, thinking, and being (i.e., self-expression through attire or communication style). To this point, the use of hip-hop (i.e., rap lyrics, historical contributions of rappers) in literacy instruction with African American youth has gained attention among "new literacy" theorists (Hull & Schultz, 2003). "New literacy" theorists postulate that literacy practices occur just as much in out-of-school contexts as within-school contexts, and that many students possess skills that are not readily evident in the school setting (Hull & Schultz, 2003). For example, African American and urban youth's community practice of lyric composition and performance (i.e., creating and reciting original rap songs) is one such literacy practice. According to Glenn-Paul (2000), rap music is a "vehicle through which teachers can privilege student voices" because it "affirms rather than mutes" (p. 247). When educators accept the relevance of skills such as these and incorporate them into instructional practices, they may accept the inextricable link between literacy and culture.

As will be reviewed in subsequent sections of this chapter, there is a burgeoning corpus of theoretical and applied literature on the usefulness of infusing out-of-school, culturally-based competencies, such as hip-hop's rapping component, into school-based

instruction with urban youth. A current trend in the research on urban education is the study of culturally-responsive pedagogy (Gay, 2010), as discussed below.

Culturally-Responsive Pedagogy and its Predecessors

There is a long history of theoretical explanations for the academic underachievement of African-American students. Beginning with the genetic paradigm and continuing with the cultural difference paradigm, each has contributed to the emergence of an interest in culturally responsive pedagogy, which many scholars today accept as a viable alternative to traditional instruction with African-American children (Gay, 2010; 2010). As culturally-responsive pedagogy is best understood through the history that shaped it, a review of the historical paradigms that were constructed to explain the discrepancies in academic achievement between minority students and their non-minority peers, is presented below.

The Genetic Paradigm

Early theories about the achievement gap between African-American and White students relied on the genetic paradigm. In the early part of the twentieth century, prior to societal interest in the contributions of socioeconomic, historical, and cultural influences on the acquisition of mainstream knowledge, genetic theorists Lewis Terman and Francis Galton used the genetic paradigm to explain certain ethnic groups' low performances on measures of intelligence (Galton, 1869; Terman, 1916). Charles Spearman, who in 1904 developed the "g," or "general intelligence" factor, posited that intelligence was single-entity, inherited, and fixed (Bouchard, 2009). According to the genetic paradigm, intellect was directly related to inherited biological differences among ethnic groups; the impact of factors such as segregated schooling and poverty were not acknowledged (Galton,

1869). Genetics were thought to predetermine intellectual capacity and researchers in this area suggested the intellectual inferiority of specific ethnic groups (i.e., African-American, Irish, Hungarian, and working-class English) (Goddard, 1917).

The genetic paradigm gained and lost momentum several times throughout history, most notably re-emerging in popularity during President Lyndon B. Johnson's War on Poverty Initiative of the 1960's (Morrow & Torres, 1995). Supporters of genetic predeterminism posited at the time that early educational interventions designed to provide low-income preschool students of color with academic instruction (i.e., Head Start) were wasteful because, according to genetic theorists, the African-American population was, by heritage, intellectually inferior and immune to the positive effects of such interventions (Lomotey, 2010). Despite efforts by African American social scientists such as Horace Mann Bond to dispel the underlying assumptions proposed by genetic theorists (Urban, 1992), the influence of the genetic paradigm and its impact on modern views of academic intelligence is very much a current issue. The popularity of the publication, *The Bell Curve* (Herrnstein & Murray, 1994), which again attempted to substantiate the notion of biological intellectual predisposition, underscores this notion. In *The Bell Curve,* Herrnstein and Murray (1994) suggested that biological factors were more likely to explain academic underachievement of African Americans than the collective impact of societal factors. Because the genetic paradigm posits that intellect is largely inherited and thereby not modifiable, little attention was directed toward enhancing the relevance of academic instruction in order to more effectively engage at-risk youth. The genetic paradigm suggests that children's cognitive functioning remains

relatively fixed and therefore justifies the lack of innovative educational opportunities available to African American students.

The Cultural Deprivation Paradigm

The cultural deprivation paradigm was an early effort to challenge the genetic paradigm. The cultural deprivation paradigm emerged in the late 1960's with a focus on the collective impact of urban society and its role in academic underachievement (Ausubel, 1964). Theorists suggested that some African-American families failed to "transmit the values and cultural patterns necessary for the students to achieve in mainstream academic institutions" (Lomotey, 2010, p. 196) and believed that the primary function of schools was to offset the effects of a "deficient" cultural environment by providing students with mainstream academic skills (i.e., Standard English) and a behavioral framework (i.e., interpersonal practices) so that they would succeed in mainstream society (Spradlin & Parsons, 2008). The process, which has since been referred to as "deculturalization" (Spring, 2003), implied a cultural hierarchy favoring Eurocentric values while categorizing Black culture as "deficient" and in need of remediation (Spring, 2003).

In many ways, the cultural deprivation paradigm continues to be relevant to most models of learning, as evidenced by the litany of current research conducted on environmental factors such as low birth weight, single-parent families, inadequate health care, and exposure to societal ills such as gang violence and the illegal drug trade, that are believed to adversely affect achievement among African American students. While these factors can influence any child's readiness to learn, scholars such as Barbara Shade (1982) have argued that the cultural deprivation theory perpetuated a deficit perspective

with regards to the African-American community. Under the deficit model, the cultural backgrounds of low-income students of color were presented as barriers to overcome in order for these students to achieve academic success, decrease oppositional behavior, and counteract a lack of parental support (Lynn et al., 2006). By associating minority children of low-income background with these "deficits," the deprivation model perpetuated negative stereotypes and contributed to lowered expectations by teachers (Ford, Harris iii, Tyson, & Trotman, 2002). According to the deprivation model, the solution to the achievement disparities that persisted between minority students and their counterparts was to "transform the child" (Howard, 2010; p. 69). In response to the aforementioned concerns, the cultural difference paradigm, whereby the study of cultural "differences" sought to replace the deficit perspective, was introduced in the literature (Ford et al., 2002).

Cultural Differences Paradigm

The cultural differences paradigm emerged in the 1970s and 1980s as a counterargument to the cultural deficit perspective on African-American students' academic underachievement (Spradlin & Parsons, 2008). Cultural differences theorists such as Barbara Shade and Janice Hale-Benson argued that the deficit-based, "transform the child" instructional model served to replace the cultures of racially diverse students with that of the White, middle-class (Lomotey, 2010). For example, under the deficits model, Native American students might be labeled as academically disengaged or inattentive because they demonstrate respect by averting eye contact. When they are expected to engage in direct eye contact with their teachers, they are forced to abandon their cultural practices (Gay, 2010). Latino students might internalize beliefs that their

culture, which values collaboration and group work (Turner, Gutiérrez, Simic-Muller, & Díez-Palomar, 2009), is inferior to White culture when competitiveness and independent work is encouraged in the classroom.

Whereas the cultural deprivation model sought to transform the child, the cultural differences paradigm sought to "transform the school" (Howard, 2010; p. 69). In order to work towards closing the achievement gap between African-American and White students, cultural differences theorists proposed to align public school culture with the cultures of its diverse student population in order to promote pride, self-esteem, and cultural validation (Banks & Banks, 2004). The cultural differences paradigm was, in essence, theory designed to raise awareness about cultural hegemony in American public schools. The implementation of the ideas generated by the cultural differences paradigm is what is currently referred to in the literature as culturally-responsive pedagogy (Gay, 2010).

Culturally Responsive Pedagogy

Culture is most commonly defined as a set of norms, values, beliefs, behaviors, and ways of knowing that influence the way individuals react to their environment (Trumbull, 2001). Culturally responsive pedagogy postulates that the academic achievement of minority students will increase when continuity between their culture of reference (i.e., home and community) and the culture of the schools they attend is established (Gay, 2010; Irvine, 2003; Ladson-Billings, 1995; Nieto, 2010). The continuity is achieved by aligning academic instruction with the cultural backgrounds and interests of a particular classroom's student body. For example, Tatum (2005) used African-centered texts to teach reading comprehension skills to African American

secondary school students, and Ladson-Billings (2009) suggests teachers explore the seminal contributions of African Americans to the fields of mathematics and science, in order to engage African American students in school. It is an alternative to the mainstream curriculum in traditional instruction which is characterized by Eurocentric, middle-class norms (Gay, 2010). Culturally-responsive pedagogy "teaches *to and through* [minority students'] personal and cultural strengths, their intellectual capabilities, and their prior accomplishments…it does for Native American, Latino, Asian American, African American, and low-income students what traditional instructional ideologies and actions do for middle-class European Americans. That is, it filters curriculum content and teaching strategies through their cultural frames of reference to make the content more personally meaningful and easier to master" (Gay, 2010; p. 26). Thus, culturally-responsive instruction refers to culturally-relevant academic content, instructional strategies, and instructional materials.

Much of the extant literature on culturally responsive pedagogy is narrowly-focused, emphasizing ethnocentric instruction, such as the design of reading modules that seek to encourage struggling readers to identify positively with reading by using texts written by authors who share their ethnic backgrounds (Ntiri, 2009). For example, in his work with a class of 29 African American eighth-grade students who had failed to demonstrate basic reading proficiency on an administration of the Iowa Test of Basic Skills, teacher-researcher Tatum (2000) used culturally-relevant reading material to increase students' oral reading fluencies. During one 50-minute class period per school day, students repeatedly read selected passages from Martin Luther King Jr.'s "I Have a Dream" speech, and books by Frederick Douglass and Margaret Walker, aloud to each

other until each was able to read fluently. Tatum (2000) argued that the cultural

components to the texts were critical to the intervention because they allowed for basic

skills instruction that simultaneously served to "strengthen [students'] cultural

competence" and "nurture students' identities" (p. 54). He observed that in addition to

improved oral reading fluency, students who were once reluctant readers began to

participate in class discussions and engage in text-based critical thinking exercises

(Tatum, 2000).

While ethnocentric instruction can be an effective way to teach struggling

students via culturally responsive pedagogy, research indicates that instruction does not

have to be ethnocentric to be culturally-relevant. In a qualitative study of the instructional

practices of second, third, and fifth grade mathematics teachers in two urban schools in

New Haven, Connecticut, Ensign (2003) found that the most effective teachers were

those who conceptualized culture as "how we do and understand things *around here*,"

and designed instruction based on the experiences of "the communities of the particular

students in a particular classroom rather than necessarily denoting the characteristics of a

larger cultural ethnicity" (p. 415). Ensign (2003) observed that teachers who encouraged

their students to develop and solve math problems based on personal experiences (i.e.,

using layaway for purchases, or saving enough money to contribute to their family's rent

at the end of the month) were able to engage these students in the process of learning

numeracy for longer periods of time than teachers who taught directly from textbooks.

Furthermore, Ensign (2003) noted that students who were taught numeracy within the

culturally relevant framework tended to score higher as a group on textbook-based

assessments than students who were taught exclusively from the same textbooks.

Nelson and Rogers (2003) observed the culturally-relevant instructional practices of an African American, urban preschool teacher in Michigan who used the concept of gardening to design developmentally-appropriate reading and numeracy instruction. The children learned to read with picture books about gardening practices across the world, and developed numeracy skills using manipulatives that included beans and seeds they had read about in the books. The children saw their home cultures and behavioral practices honored in the classroom in different ways: a section of the classroom's creative play area was turned into a mock produce station equipped with vegetables used by many of the children's families, as reported to the teacher by their parents, and the culture of the preschool set was respected when children were encouraged to move freely among activities (Nelson & Rogers, 2003).

The implication of the benefits observed in the preceding ethnographic, qualitative studies suggests that the concept of culturally-relevant instruction can be operationalized in different ways. Content, strategies, and materials can and should be adapted to meet the cultural experiences of students in order to impart meaningful learning. Perhaps as such, researchers of culturally responsive pedagogy caution against a static interpretation of culture. They posit that culture is a broad-sweeping, fluid, and multidimensional term that transcends race and ethnicity (Howard, 2003), and suggest that a broader definition of culture is necessary in the field of education if teachers are to appeal to the interests of urban youth of color, many of whom identify strongly with hip-hop "culture" (Irizarry, 2009).

Toward a Broader View of Culture

Hip-Hop has been defined as an "extraordinary linguistic phenomenon" that has left "an indelible mark on the language of parts of the English-speaking world" (pbs.org, n.d.). Though widely attributed to African-American youth living in the Bronx in the 1970's, hip-hop's roots can be traced to the pre-colonial era (Alridge & Stewart, 2005). The language used among members of hip-hop culture has been referred to as a modern version of "Black Vernacular" (Forman & Neal, 2004) invented by African slaves to communicate amongst each other without detection during the times of slavery. It is a language particular to hip-hop youth, whether used in interpersonal communication or, for example, expressed musically with creative rap lyrics. Centuries later, young African-Americans in low-income urban districts continue to face oppressiveness in the forms of institutionalized racism, joblessness, and poverty (Dotterer, McHale, & Crouter, 2009). Members of hip-hop culture are bound by a distinct aesthetic, language, and shared experiences of marginalization and urban blight (Jackson & Anderson, 2009). As such, hip-hop youth have constructed a distinct language and vernacular that allows them to verbally express their resistance to the majority culture (Prier & Beachum, 2008; Taylor & Taylor, 2007; Young, Wright, & Laster, 2005).

In many public schools, the cultural and expressive aspects of hip-hop culture are discouraged (Smith & Smith, 2009; Emdin, 2010) Students who identify with hip-hop are often told, implicitly and explicitly, that their dress, vernacular, and verbal assertiveness towards authority figures (which is central to hip-hop culture) are unacceptable (Newman, 2005). However, urban education scholars caution against dismissing hip-hop as lacking in instructional possibilities (Baker & Homan, 2007;

Forell, 2006; Hall, 2007; Jackson & Anderson, 2009; Jones, 2009; Kirkland, 2008; Newman, 2005; Sánchez, 2010; Shiller, 2009). They argue that the central themes of hip-hop (i.e., lack of safety and the criminalization of poverty) mirror contemporary urban life for most African-American youth and, as such, are worthy of exploration in the classroom (Duncan-Andrade & Morrell, 2008). As will be demonstrated below, hip-hop can be a catalyst for informative discussions about very real urban issues, such as violence, hegemony, and marginalization.

Hip-Hop Instruction as Culturally-Responsive Pedagogy

For African-American youth, hip-hop culture often provides a frame of reference through which they interpret their experiences, and through which they construct their identity (Milner, 2006). Clay (2003) conducted an ethnographic study on hip-hop's relationship to identity formation with a group of Black adolescents who attended a low-income community center in Northern California. The study revealed that African American youth use language, dress, and gestures to construct their identities as part of hip-hop culture. Clay (2003) also observed that participants who could recite popular rap lyrics were perceived by their peers as being more popular than those who could not. This suggests that the ability to rap is a skill that is valued in hip-hop culture and suggests the viability of rap-based instruction.

Dimitriadis (2001) conducted a four-year ethnographic study during which he observed the relationship among rap music, popular movies, and African American youth's identity formation. Dimitriadis (2001) noted that students reported feeling less vulnerable when they explored the successes of local rap artists because they were able to visualize their own futures in a positive light. Further, students explored feelings of

vulnerability through interactive discussions that began with talk about the hip-hop industry, such as the fatal shooting of rap artist Tupac Shakur. Dimitriadis's (2001) findings, though observational and hence not replicable, suggest that rap may have a place in the educational setting, particularly when used to develop critical consciousness among urban youth. Empirical support for its integration is limited but increasing.

While Dimitriadis's (2001) study was conducted at a community center, Hill's (2009) similar ethnographic study illustrates that rap texts can be used to scaffold critical thinking in the public school language arts classroom. Twenty ethnically diverse, urban high-school students who were enrolled in a "Hip-Hop Lit" language arts class examined and discussed their memories of personal experiences through the lens of the lyrics of *Things Done Changed* by rap artist Notorious B.I.G. According to Hill (2009), listening to the rap song's graphic lyrics about what it was like for Notorious B.I.G. to grow up poor in the inner-city led students to engage in critical dialogue about their own inner-city experiences which in turn led to discussions on broader topics, such as politics. It was reported that Black, low-income students identified most strongly with the "Hip-Hop Lit" curriculum, describing it as a "Black thing" to which their White classmates should not pretend to relate. Interestingly, Hill's (2009) research demonstrated that hip-hop based instruction can have varied outcomes, such as creating subsets of marginalization among students. For example, students who were described as African American and middle-class reported feeling excluded from discussions by their low-income peers due to their economic status.

When implemented effectively so that students' cultures are affirmed and validated during academic instruction, culturally-responsive instruction "can go a long

way in improving the education of students whose cultures and backgrounds have been maligned or omitted in schools" (Nieto, 2010; p. 97). In addition to affording students a forum within which to explore issues of identity and cultural affiliation, rap music has been demonstrated to facilitate critical thinking skills in school-aged African American youth. In an ethnographic study conducted with eight ethnically-diverse high school seniors (five males and three females of Asian, Mexican, Iranian, Caucasian, and African American descent), Williams (2007) observed how hip-hop-based discussions can scaffold critical thinking and self-exploration. As a participant-researcher, Williams (2007) joined the students in group discussions on subjects that they had identified as synonymous with hip-hop (i.e., violence and drug use). Williams (2007) found that the participants readily explored the connections between the topics and their own experiences. While Williams' use of exit interviews may have influenced the participants' feedback on the lesson (that is, students may have expressed what they believed the researcher wanted to hear), the results suggest that exploring hip-hop-based issues in the classroom can facilitate critical thinking and self-expression among students.

Similar to Williams' (2007) study, Morrell and Duncan-Andrade (2002) reported observations on the effectiveness of an instructional unit that incorporated rap music into a high school senior poetry course in an urban, culturally-diverse classroom. After an introductory module on important literary periods, such as the Elizabethan age and the Post-Industry Revolution, and a review of selected canonical literature from each era, students were required to create an original poem and an original rap song that linked contemporary societal issues to those which were reflected in the period literature. Students were required to present their work to the rest of the class who would, in turn,

critique the arguments made explicit in their work. By teaching students to examine themes present in period literature through the lens of hip-hop culture, Morrell and Duncan-Andrade (2002) encouraged students to engage in critical thinking in a culturally-relevant manner while adhering to core curriculum requirements. The findings of this study are limited because the students' racial and ethnic backgrounds were not specifically defined (they were only identified as "ethnic minority"), the number of participants was not defined, and the setting was an Advanced Placement urban English and language arts classroom. However, the results suggest promise for the effectiveness of incorporating rap into instructional approaches in urban settings.

Stovall (2006) demonstrated that rap-based instruction can be applied outside of the language arts classroom. With a social studies class of 16 African American and Latino high school students, Stovall (2006) used socially-conscious rap lyrics from songs from hip-hop groups such as OutKast to generate discussions about societal issues that affected his students on a personal level. Stovall (2006) played the rap songs for his students and allowed class time for the group to explore how the societal issues rapped about might affect students on a personal level. Students engaged in critical discussions about issues such as racial inequality and the underrepresentation of diverse youth in public schools. This qualitative study did not yield measurable data; instead, it reported on the researcher's observations. Though the research design does not allow for controlled replication, it also adds to the support for innovative instructional practices with urban youth.

In comparison to the number of studies that explore how hip-hop can provide a forum for the exploration of critical-consciousness and societal issues in the classroom,

relatively fewer studies exist on how teachers can use hip-hop to teach academic skills such as reading, writing, and math. Cooks (2004) observed that in an eighth-grade urban language arts classroom, students who reportedly wrote raps recreationally were more able to generate high-quality academic essays than those who reportedly did not write raps recreationally. Cooks's (2004) ethnographic study demonstrated that students who wrote raps for pleasure were adept at using analogies, easily expanded on general essay topics, and supported important points in their academic essays more than students who did not write raps. The implication for classroom instruction is that students' interests, when incorporated into academic work, can enhance learning. Almost 20 years earlier, rap music was utilized in a study by Hicks (1987) to examine the effectiveness of the genre as an instructional method for urban preschool children. In her work with 40 three- and four-year old African American and Hispanic students, Hicks used two audio-visual instructional tapes to teach the names of 10 parts of the body to preschoolers assigned to either a treatment or control group. Participants in the treatment group watched a version of the audio-visual tape that was recorded with rap music in the background while the control group watched a version that was not set to rap music. Results of a pre-test post-test analysis demonstrated that participants who viewed the rap music version of the instructional unit learned a statistically significant greater number of body parts than participants in the control group. The results demonstrate that incorporating rap music in the classroom can yield benefits among the youngest of learners.

One of the progenitors of culturally-responsive instruction, Geneva Gay (2000), postulated that communication skills are crucial for African American students to facilitate their self-advocacy skills. Communication can not occur without language and

language can not be developed without even the most basic vocabulary. As vocabulary is one of the core components of language, and language forms the foundation for literacy (Justice, McGinty, Cabell, Kilday, Knighton, & Huffman, 2010), it follows that achievement in all academic areas can prove difficult for students who are lacking in academic vocabulary (Baumann & Graves, 2010). By the time they reach the twelfth grade, most middle-to-upper class White students are estimated to know the meaning of approximately 80,000 words (Fang, 2004). Conversely, The United States Department of Education (2003) reported that a mere 40% of African American high school graduates possess the verbal skills necessary for minimum-wage employment, regardless of their socioeconomic status.

The Importance of Vocabulary

According to The National Reading Panel (2000), vocabulary is a core component of literacy. As students progress through elementary school, and particularly before they reach the third grade, the extent of their vocabulary influences the degree to which they will become literate by academic standards (National Reading Panel, 2000). Vocabulary is typically one component of standardized reading measures, which in turn are currently used to determine proficiency in areas of literacy, such as reading (Fang, 2004). Students' verbal subtest scores on standardized measures of intelligence (i.e., WISC-IV) are strongly predictive of academic achievement in mainstream educational classrooms ($r =$ .7 to .8) (Seon-Young, Olszewski-Kubilius, & Peternel, 2010). Further, scores on vocabulary subtests are also highly predictive of student's composite Verbal IQ Scores (Seon-Young, Olszewski-Kubilius, & Peternel, 2010). These findings suggest that vocabulary knowledge significantly effects learning across academic subjects.

Vocabulary exists in a minimum of two forms: oral and written. It is used to convey information (in the case of expressive vocabulary, or expressive language) and to interpret information (as in receptive vocabulary, or receptive language). Oral vocabulary is the earliest to develop, with conservative estimates of pre-literate children's vocabularies in the area of 6,000 words (Chall, 1987). The ability to create and interpret the written word comes to the forefront with the advent of formal schooling, when academic skills are introduced and reinforced.

Since new words are encountered on an ongoing basis throughout the lifespan, vocabulary as an academic subject is never likely to be mastered. Nonetheless, success in school, both academic (Beck, McKeown, & Kucan, 2002) and social (Stockman, 2010) requires competence with language. Vocabulary knowledge is directly linked to success in many areas (Beck, McKeown, & Kucan, 2002). Students with well-developed vocabularies process cognitive information more fluently and express their ideas in speaking and writing more precisely than students with less proficient vocabularies (Baumann & Graves, 2010; Chall, 1987). Conversely, students with poor vocabularies are vulnerable to academic difficulties (Baumann & Graves, 2010). Students with poor oral language skills have been identified as likely to exhibit attention-deficit-type behaviors and to meet criteria for eligibility for special education services (Monroe, 2005). Additionally, while researching a possible correlation between developmental psychopathology and language, Cohen (2001) reported that students who entered elementary school with deficient vocabulary and social skills were more likely to be at risk of being retained in later grades, and subsequently drop out of school altogether, than students determined to be proficient in expressive vocabulary in elementary school. As

has previously been discussed, African American students are at greater risk for dropping out (Somers et al., 2009).

Beyond academics, the degree to which students develop healthy social-emotional functioning can also be linked to their vocabulary skills. Recent research indicates that students with poor vocabularies may be associated with poor social skills and be vulnerable to interpersonal difficulties. Benner, Beaudoin, Kinder, and Mooney (2005) studied the relationship between vocabulary and social adjustment among 150 kindergarten, first grade, and second grade students (mean age 6.53 years) enrolled in a Midwestern elementary school. The students were ethnically diverse, of Caucasian (77%), African American (12%), Hispanic (9%), Asian (1%), and Native American (1%) backgrounds. They compared students' scores on the Social Skills Rating System (Elliott & Gresham, 1990), which was completed by their teachers, to scores on the vocabulary component of the Test of Auditory Comprehension of Language-3 (Carrow-Woolfolk, 1999). The researchers found that vocabulary scores were negatively correlated with social skills. Benner et al's (2005) findings support the research of Craig-Unkefer and Kaiser (2002), who found that preschool students with deficient vocabulary skills were more likely to be rated by their teachers as having low social skills than peers with stronger vocabulary skills. The research implies that vocabulary instruction can facilitate broader academic growth and social skills, both of which are essential to students' overall success in school.

Why Culturally Relevant Vocabulary Instruction Matters

Word learning is a complex and ongoing endeavor that occurs in both natural and structured settings, allowing for a broad range of instructional possibilities. Nonetheless,

though it is estimated that direct instruction can account for some two to three hundred words of the approximate 3,000 words learned each year by students in grades three through twelve (Herman, Anderson, Pearson & Nagy, 1985; Nagy & Anderson, 1984), direct instruction of word definitions continues to be the most widely used method of teaching vocabulary in the classroom (National Reading Panel, 2000). During direct instruction, teachers provide students with a dictionary definition of a word, which students are expected to memorize. It relies on rote recall.

Critics of direct vocabulary instruction argue that, for students who are culturally-diverse, and particularly for those who come from low socioeconomic backgrounds, direct vocabulary instruction may not be the best option if authentic learning is to occur (Greenwood, 2010; McCollin, O'Shea, & McQuiston, 2010). Direct vocabulary instruction may reinforce existing cultural incongruence in the classroom by requiring minority students to learn new definitions within a context provided by a teacher whose experiences are often vastly different than those of the student's, as in the case of a White, middle-class teacher of African American, low-income students (Howard, 2010). When students who have no previous exposure to a word are expected to memorize a teacher-provided definition, they are deprived of opportunities to make connections between its definition and personal cultural referents (Miller & Veatch, 2010) and their chances of sustaining long-term retention of its definition are decreased significantly (Nagy, Herman, & Anderson, 1985). Because academic vocabulary differs significantly from the vocabulary which is "central to the life experiences, behaviors, and ways of understanding" of culturally-diverse children (Lovelace & Stewart, 2009, p. 168), minority students must be given as many opportunities as possible to connect with the

meanings of novel words when they are in school (Lovelace & Stewart, 2009).

Researchers posit that contextual instruction, or that which allows students to interact

with words beyond memorizing definitions, may be more effective than direct instruction

(Greenwood, 2010; Kelley et al., 2010; Lovelace & Stewart, 2009; McCollin, O'Shea, &

McQuiston, 2010). As discussed below, contextual instruction can be delivered within a

culturally-responsive framework.

Generally, researchers agree that knowing a word's meaning, in the most

complete sense, involves familiarity with the word's underlying concept (Pressley, 2000).

Because concepts are learned within the context of existing knowledge, this suggests that

meaningful connections between new words and existing knowledge are essential for

long-term vocabulary learning. There is considerable disagreement about what constitutes

the effective vocabulary instruction. Nagy et al. (1985) argued that vocabulary instruction

is most effective when it allows students to construct meaningful ties between their

experiential knowledge and newly learned words. More recently, Beck, McKeown, and

Kucan (2002) posited that direct vocabulary instruction is most effective in increasing

reading proficiency. Empirical studies that combine the two approaches to instruction

appear to yield positive results (Greenwood, 2010; Miller & Veatch, 2010).

Kelley, Lesaux, Kieffer, and Faller (2010) designed an instructional vocabulary

unit based upon three guiding principles among vocabulary instruction research.

According to Kelley et al. (2010), essential components of vocabulary instruction should:

(a) focus on deeper instruction of fewer words, (b) include general-purpose, high-utility

words, and (c) balance direct instruction of vocabulary words with word-learning

strategies. Kelley et. al (2010) found that sixth grade students who, after direct

vocabulary instruction on novel academic words from Coxhead's (2000) academic word list, discussed issues of personal relevance using the same words, evidenced higher scores on a reading comprehension test after the 18-week study than students in the control group. Specifically, students received direct vocabulary instruction followed by teacher-led discussions "about an *incident* that happened to them that morning, described their *community* or the *complex* they live in, or discussed how they *identified* with bullied students read about in a chosen text" (Kelley et. al, 2010; p. 11). By incorporating the newly learned vocabulary words into discussions on issues that affected students directly, this study utilized culturally-relevant methods to complement direct vocabulary instruction. The authors utilized words from the same word list as this dissertation's method, but their documentation is lacking (results are presented anecdotally rather than with actual data); however, the implications for instruction that connects the personal lives of students to novel vocabulary words are clear.

Kelley et. al's (2010) study examined the effects of culturally-relevant vocabulary instruction with middle-school students. However, when developmentally appropriate materials are utilized, culturally-relevant vocabulary instruction can be successful with younger students as well. Lovelace and Stewart (2009) examined the effects of using multicultural storybooks to supplement direct vocabulary instruction in a pilot study with five African American second grade students between the ages of 7.0 and 8.0 years. In order to be eligible for the study, participants were required to have demonstrated at least average intelligence as determined by their scores on an administration of the Test of Nonverbal Intelligence, Third Edition (Brown, Sherbenou, & Johnsen, 1997), and to have scored at least 1 *SD* below the mean on each of the following measures: The Expressive

One-Word Picture Vocabulary Test – Third Edition (Brownell, 2000a), and The

Receptive One-Word Picture Vocabulary Test – Third Edition (Brownell, 2000b).

During eight, 30-minute sessions that occurred over the course of four weeks, examiners

read to the participants from the culturally-relevant text *Miss Viola and Uncle Ed Lee* and

also delivered direct instruction on words that occurred repeatedly in the text (such as

"focus" and "combine"). Following the intervention, participants were required to

demonstrate word learning by using the newly learned target words in their own

sentences. Whereas upon beginning the study participants lacked knowledge of word

definitions, after intervention all participants were able to use the target words correctly

in the sentences they redacted to the examiners. Lovelace and Stewart (2009) concluded

that significant gains in vocabulary can be realized when direct instruction is combined

with culturally-relevant instructional materials.

As discussed earlier, "culturally-relevant" instruction does not always entail using

ethnically-congruent materials such as the African American literature used in Lovelace

and Stewart's (2009) study. Similar to Kelley et. al (2010), who engaged students in the

process of using newly-learned words during discussions about their personal

experiences, Borgia (2009) capitalized on students' interest in technology to train an

urban, middle school teacher to deliver vocabulary instruction in the form of podcasts

(lessons delivered via iPods). Working with fifth-grade, urban Midwestern students of

ethnically-diverse, low-income backgrounds, the teacher taught a lesson on The Great

Depression using novels such as *The Seedfolks.* She supplemented traditional instruction

with podcasts that were designed to reinforce vocabulary excerpted from the novel.

Borgia's (2009) qualitative study was based upon observations of teachers and students;

as such, it lacks empirical data. Also, it may be rare that an urban school serving low-income students will have iPods available for its students, so it may be difficult to replicate. However, the message is aligned with Ensign's (2003) findings that teaching is most effective when it taps into students' cultural interests, as defined by "how we do and understand things *around here*," and designed based on the experiences of "the communities of the particular students in a particular classroom rather than necessarily denoting the characteristics of a larger cultural ethnicity" (p. 415).

Summary

"American schools, their academic activities, structures, and materials primarily reflect social, historical, and cultural traditions of a white, middle-class mainstream" (Garth-McCullough, 2008, p. 3). For African American students in particular, this often means that formal education can be an isolating, culturally-depriving process. As long as classroom instruction ignores the culture of African American students and fails to validate their experiences and struggles, it is likely that factors contributing to the existing achievement gap (i.e., disproportionate dropout rates, referrals to special education placement, behavioral referrals, etc.) will persist.

Acquisition of vocabulary is especially critical for academic achievement. Children acquire most of their vocabulary through exposure to their accessible environment, and the degree to which they are able to build a rich and varied vocabulary depends highly on the quality of their socio-cultural experiences (deVilliers, 2004). It is, therefore, incumbent upon educators to assist students in bridging the gap between the knowledge they acquire outside of school with that which is learned in the classroom. Culturally responsive vocabulary instruction is one such way to teach culturally-diverse

students valuable language skills that are essential for success in school as well as success beyond the classroom. More specifically, culturally-relevant instruction should encompass innovative instruction that incorporates "cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students to make learning encounters more relevant and effective for them" (Gay, 2010, p. 29).

Building upon culturally-responsive pedagogy, the effectiveness of vocabulary instruction for African American students may be enhanced if it incorporates the opportunity to interact with words and construct personal meaning using novel words (Kelley et al., 2010; McCollin et al., 2010; Miller & Veatch, 2010). Broadening the definition of "culture" to include hip-hop culture, this dissertation examines the effectiveness of employing rap music to teach vocabulary. Borne of the need for survival among pre-colonial African slaves and the contemporary voice of urban youth, this dissertation seeks to explore the effectiveness of rap as a culturally-relevant instructional tool which requires further empirical substantiation.

The purpose of this study was to contribute to the empirical research on culturally-relevant instruction with hip-hop-affiliated youth. The research was conducted with sixth-, seventh-, and eighth-grade charter school students. It was hypothesized that students who used newly learned vocabulary words to create original lyrical raps would acquire and retain a greater number of word definitions than students who were exposed to novel words during direct instruction alone.

CHAPTER III

Method

Setting

This study was conducted at a charter school located in a large, low-income, urban district in northeastern, New Jersey. This charter school was established in 2003 by a group of local residents and business owners who proposed to offer the community an alternative to traditional public school education with curricula that emphasized the development of scientific knowledge and technological skills, along with the core academic curriculum that was mandated by the New Jersey Department of Education. Initially, this charter school admitted students in grades six, seven, and nine only (eighth grade was not included for reasons not disclosed by the founders of the charter school). In the charter school's second year, grade eight was added. Each year thereafter, the charter school expanded to add one higher grade level in order to keep the existing students in the school as they were promoted to higher grades. Grade six remained the charter school's lowest grade level for the duration of the study.

Each grade level was divided into four sections of 18 students each. The charter school's administration indicated to the researcher that students were randomly assigned to class sections; students were not assigned to sections based upon academic achievement. Admission to the charter school was open to all residents of the local school district on a first-come first-serve basis and all who applied were admitted until each section of each grade reached maximum capacity. If a class had not reached enrollment capacity with students from the local school district, then the admission process was opened to any student of any geographical region who wished to attend the school, again

on a first-come, first-serve basis. The maximum class size of 18 students was proposed

by the charter school's founding members in their initial application, and subsequently

approved by the New Jersey Department of Education, Division of Charter Schools. At

the time of the study, the charter school had been in operation for four years.

Procedure

Pre-Implementation

The researcher met with the charter school's Lead Person (the equivalent of a

public school Principal) and Vice Principal to present the idea for the study for the

purposes of determining whether this study could be carried out in the charter school, and

if there was agreement that the study could be implemented, that preliminary permission

to conduct the study at the charter school would be granted. The administrators had not

identified a need for rap-based instruction, but agreed that data gathered from the study

could be beneficial for future instructional design at the charter school and agreed to

allow the researcher to conduct the study on site. During this phase of the study, the

charter school administrators did not raise any concerns.

Data Collection

Once the consent and assent forms were approved by the Rutgers University

Human Subjects Institutional Review Board, the researcher met again with the Lead

Person and Vice Principal. At that time, the administrators expressed concern about the

researcher potentially interfering with ninth-grade academic instruction time. They

determined that it was no longer possible for the researcher to access ninth-grade students

due to scheduling conflicts; however, an eighth grade class had been added at the school,

and the administrators concluded it was possible for the researcher to work with students

in grades six through eight without interrupting their academic instruction because these grades shared common lunch periods. Permission was then verbally granted to the researcher by the Lead Person and Vice Principal to work with students in grades six through eight.

Consent forms (Appendix A) were distributed via postal service to all 200 parents or guardians of all students enrolled in grades six through eight in the charter school; however, parental consent was not obtained for 138 students. Per the suggestion of the Lead Person, during a regularly scheduled Monday morning meeting, the researcher briefed all sixth, seventh, and eighth grade teachers that a study was being conducted. During the same meeting, the Lead Person informed the first period sixth, seventh, and eighth grade teachers that they would be responsible for distributing and collecting Assent forms (Appendix B) to and from the 62 students for whom consent to participate was received from parents or guardians. The Lead Person explained briefly to the teachers that he believed that if the material were distributed and collected by the teachers during first period, they would be able to do so at their convenience, and avoid potential disruptions to class time that might have occurred if the researcher came to distribute and collect the forms from students throughout the day. Students were required to sign an Assent form to indicate their willingness to participate in the study. Of the 62 students who received assent forms, 14 indicated that they did not wish to participate in the study and did not sign their assent form.

Research Design

A two-group posttest-only randomized experiment was utilized to investigate the acquisition and retention of novel vocabulary words. This design is a modified version of the pre-test post-test control group design (Campbell & Stanley, 1966), which is commonly used among educational researchers investigating whether changes in educational outcomes occur as a result of academic interventions (Dugard & Todman, 1995). A pre-test post-test control group design assumes that participants are randomly assigned to either a treatment or a control group, and each group is scored on a test before intervention (pre-test) and after intervention (post-test) (Campbell & Stanley, 1966). This study's two-group post-test-only randomized experimental design utilized a contrast group in lieu of a control group due to the researcher's inability to control for the amount of time students spent studying word definitions after the treatment phase and during the time which elapsed in between each post-test. Although a pre-test is not required for the analysis of a two-group post-test-only randomized experiment (Trochim, 2000), the researcher did administer a baseline measure to determine that participants in both groups scored equivalently on a pre-test; however, the nature of the baseline measure differed from that of the post-tests (the former utilized a fill-in-the blank format and the latter, a multiple-choice format); hence, two, one-way ANOVAs were run on each of the post-tests to determine whether changes occurred as a result of method of instruction.

The independent variable was type of vocabulary instruction. The contrast group (DI) received direct instruction only and the treatment group (DI + RA) received a homework assignment that required they compose an original rap song using all words taught during direct instruction, which they also received. The dependent variable was

word knowledge as measured by scores on multiple-choice tests administered at two- and four-weeks post-treatment.

Participants

      Participants' descriptive data are shown in Table 1. Twenty three male and twenty five female, middle school students from grades six through eight participated in this study. Eighteen participants were sixth grade students, 10 participants were seventh grade students, and 20 were eighth grade students. Participants' mean age was 12.9. The youngest participants were 11 years old, and the eldest, 14 years old. A review of available information on all participants was conducted to gather the following descriptive data: All participants were identified as African American on their application to the charter school. All of the participants were general education students. None qualified for speech and language services. All participants were English, monolingual speakers; none qualified for English as Second Language (ESL) instruction. No student had ever been retained. All were eligible for free lunch. Participants knew the researcher as the charter school's school psychologist. As general education students, none was in regular contact with the researcher. However, all had been present for at least one of her in-class presentations on subjects such as conflict resolution and study skills. District standardized testing results were not available for review.

Table 1

Grade, gender and mean age of participants

Grade	Gender	N	Mean Age
6	Female	8	11.4
	Male	10	11.7
7	Female	6	13.0
	Male	4	13.0
8	Female	11	14.0
	Male	9	14.0

Instruments

The study's pre-test (Protocol 1, Appendix D), and post-tests (Protocol 2,

Appendix E) consisted of vocabulary tests created by the researcher using selected words

from The Academic Word List (Coxhead, 2000). Coxhead's (2000) Academic Word List

is a list of "lexical items which occur frequently and uniformly across a wide range of

academic material" (p. 218). The lexical items on the list are considered high-incidence

and high-utility words (Coxhead, 2000). Vocabulary words contained in the Academic

Word List are not field-specific, such that words that are considered technical are

excluded from the list (i.e., *photosynthesis* (science), *jurisdiction* (social studies), or

binomial (math)). Words that are not considered academically useful are also excluded

from the list.

The researcher chose to utilize the Academic Word List (Coxhead, 2000) for this

study because of the potential long-term benefits to students who are proficient in

academic vocabulary. According to Jetton and Alexander (2004), "students who do not

become fluent in the 'language' of academic domains are unlikely to achieve

competence" (p. 17). Additionally, "secondary students who are taught these high-utility academic words and routinely placed in contexts requiring their usage are likely to be able to master academic material with more confidence and efficiency, wasting less time and energy in guessing words or consulting dictionaries than those who are only equipped with the most basic 2000-3000 words that characterize ordinary conversation" (Coxhead, 2000, p. xxx). As such, the researcher inferred that one of the benefits of using words from The Academic Word List was the potential for increased academic competency for all participants once the study was concluded.

Target Word Selection Procedure

Two vocabulary words were randomly selected from each of the Academic Word Lists's sublists (Coxhead, 2000), of which there are ten. Words are grouped into sublists according to the frequency with which they appear across academic material. For example, among high incidence/high utility words, Sublist 1 contains the most frequently found words while Sublist 10 contains the least frequently found words. The number of words to be used for the baseline measure (two from each of 10 sublists) was determined after meeting with the charter school's middle school language arts teachers and learning that their vocabulary tests typically consisted of no more than 20 words.

Randomization occurred as follows: The researcher typed all of the words belonging to each of the Academic Word List's (Coxhead, 2000) ten sublists into ten separate computer documents and saved each document by sublist number. Each sublist was printed. Then, working with one sublist at a time, all words were cut from their respective document, folded, and placed into a numbered paper bag. The first two slips of

paper that the researcher pulled from each bag contained the words which were used in the baseline measure.

Protocol 1 consisted of a numbered list of the randomly-selected 20 vocabulary words, followed by a blank space for students to record their responses. The fill-in-the-blank format of the pre-test's Protocol 1 was chosen by the researcher in order for the researcher to ascertain which words were 100% unknown to all students prior to intervention by reducing guessing based upon context cues. Protocol 1 was administered to all participants during the pre-test phase as a baseline measure. Participants were not provided the definitions to the 20 high-incidence words on Protocol 1 to control for exposure and practice effects. Protocol 2 consisted of a test that was created using the vocabulary words that were commonly unknown to all participants. These were words that all 48 participants defined incorrectly or left blank altogether on Protocol 1. A total of 15 words met the criteria for inclusion in Protocol 2.

Confidentiality was ensured as the researcher was the only party with access to the protocols. Protocols were kept in a locked filing cabinet in the researcher's office on site at the charter school. Personal identifying information was excluded from the protocols, as participants were instructed by the researcher to only enter the group number and participant number they received in the pre-test phase onto the protocols.

Baseline Measure

All 48 participants joined the researcher in the school library during the middle school's regularly scheduled lunch period for the pre-test administration. The dates and times of each group's treatment and post-test sessions had been scheduled by the researcher and provided to sixth-, seventh-, and eighth-grade teachers and the Main

Office's Attendance Officer to ensure that students who missed regular class time to meet with the researcher would not be marked absent, hence it was imperative that each student leave the session knowing his/her group membership and schedule. As such, participants were randomly assigned to either the treatment group or the contrast group during this session. Randomization was established using the order in which students entered the library (the first student to enter the room became the first participant in Group 1, the second student to enter the room became the first student in Group 2, the third student to enter the room became the second participant in Group 1, and so forth). The same pre-test was administered to all students, regardless of group membership.

Once the participants were seated, the researcher reiterated the confidential nature of the study by explaining that the protocols would not be made available to anyone who was not directly involved with the research. The participants were instructed to utilize the class period, which was a standard 42-minute period as instituted by the charter school schedule, to define the words on protocol 1 to the best of their abilities, and were reminded that the assignment did not count towards their cumulative grades. Each participant worked individually and did not receive any additional help other than the instructions given by the researcher. At the end of the 42-minute period, the researcher collected the protocols from the participants and the session ended.

Scoring of Protocol 1

The researcher scored the protocols using a modified version of Dale's (1965) word knowledge classification system, which is commonly used by researchers of vocabulary in pedagogical settings. According to Dale (1965), four stages of word knowledge exist: Stage 1: Never saw it before; Stage 2: Heard it, but doesn't know what

it means; Stage 3: Recognizes it in context; Stage 4: Knows it well. For this study, correct

responses, (a) demonstrated any understanding of the target word's meaning (i.e.,

defining "reflect" as "light bounces off of stuff"), (b) used the target word correctly in a

sentence (i.e., "When I get good grades it reflects good on my teachers"), or (c) defined

the word completely (i.e., "reflect means to cast back from an object"). Incorrect

responses (a) failed to demonstrate any understanding of the word's meaning (i.e.,

"reflect" is something you eat), or (b) were left blank. Responses were scored as correct

(1) or incorrect (0); partial credit was not awarded. Since students were not provided the

definitions of words included on Protocol 1 prior to the pre-test, an exact dictionary

definition was not required in order to earn credit for a response. The goal of the pre-test

was to determine which of the 20 words were completely unknown to all participants;

hence an item analysis for level of word difficulty was not conducted.

Experimental Design

The treatment phase began one week after the pre-test, when participants' scores

on protocol 1 were compiled and the 15 most frequently incorrectly defined words or,

"unknown words," were identified and transferred to Protocol 2. Treatment with each

group occurred during a separate session, during one of the middle school's 42-minute

lunch periods, in the school library. Group 1 was comprised of 12 girls and 12 boys

between the ages of 11 and 14 years (M = 12.5, SD = 1.2) while Group 2 was comprised

of 13 girls and 11 boys between the ages of 12 and 14 years (M = 13.2, SD = 1.0). As the

treatment group, Group 1 received Direct Instruction plus Rap Assignment (DI + RA). As

the contrast group, Group 2 received Direct Instruction only (DI). The DI treatment

consisted of the researcher reading each of the 15 words to be tested with Protocol 2

aloud to the group, providing the group with a dictionary definition, and checking to ensure that each participant recorded the definition correctly onto her/his paper. The RA treatment consisted of using all 15 vocabulary words that were taught during the direct instruction portion of the treatment phase in one original lyrical rap composition. No limitations to the lyrical rap assignment (i.e., length, number of pages, etc.) were given except that all 15 vocabulary words were to be used, in order to allow for each student to express her/himself creatively without restriction.

After direct instruction, which both groups received, Group 1 was instructed by the researcher to study the definitions and complete the rap assignment for homework. They were not required to perform the raps. Group 2 was instructed only to study the definitions for homework. Each group was also instructed to be prepared for a test on those words, which would be given by the researcher during a 42-minute lunch period in the school library two weeks after treatment. Participants were aware that they would be tested, as this was explained on the assent form that they signed prior to participation in the study. The assent form also indicated that participants would not receive compensation for their participation in the study. After the study's completion, however, the researcher treated all participants to a pizza party.

Post-tests 1 and 2

Groups 1 and 2 met with the researcher in the school library during separate 42-minute class sessions, during which the post-tests were administered. Post-test 1 occurred two weeks after treatment. Post-test 2 occurred four weeks after post-test 1 (six weeks after treatment). During both post-test sessions, the directions utilized during the treatment phase were repeated: participants were instructed to utilize the 42-minute class

period to select the correct definitions for the words on protocol 2 (the same Protocol 2 used during post-test 1) and were assured that the assignment did not count towards their cumulative grades.

While the pre-test consisted of a fill-in-the-blank protocol in order to establish baseline knowledge of novel words while reducing guessing based on context clues, the post-tests were administered in a multiple-choice format. The researcher designed the post-tests in this format because baseline had been established, and because multiple-choice testing was the normative practice among language arts teachers at the charter school. Since multiple-choice testing was the format to which the charter's middle school students had become accustomed, the researcher concluded that results of testing done in this format might be more useful for future instructional design at the charter school.

The vocabulary words along with three definitions (one correct and two incorrect) were projected onto a screen in the library and participants were instructed to select the correct one to copy onto their protocols. Upon indication, each participant worked individually and received no additional help other than the instructions given by the researcher. At the end of each 42-minute period, the researcher collected the protocols from the participants. The researcher told the participants that the session had concluded. Participants were then instructed to go to their next regularly scheduled class session. This concluded the data collection portion of the study.

Scoring of Protocol 2 and Protocol 3

The researcher scored the protocols. Responses on Protocol 2, which was used for post-test 1 and post-test 2, were scored as correct (1) or incorrect (0). Students received one point of credit when they selected the correct definition, and no credit if they selected

the wrong definition. Students were not penalized for spelling errors. Participants received no credit for items that did not indicate a selection.

Data Analysis and Hypothesis Testing Procedures

It was hypothesized that participants in the treatment group (DI + RA, or Group 1) would demonstrate the acquisition of a statistically significant greater number of definitions than participants in the contrast group (DI, or Group 2) at the time of Post-Test 1. It was also hypothesized that participants in the treatment group would demonstrate greater retention of word definitions at the time of Post-Test 2 than participants in the contrast group.

- H_1: Participants in Group 1 would demonstrate the acquisition of a statistically significant greater number of definitions than participants in Group 2, at the time of Post-Test 1.
- H_2: Participants in Group 1 would demonstrate greater retention of word definitions than participants in Group 2, at the time of Post-Test 2.

To provide an overview of the differences between the two groups, a descriptive analysis was conducted. Then, a one-way Analysis of Variance (ANOVA) was conducted on the two groups' scores on each of the post-tests. The one-way ANOVA was appropriate to assess whether treatment effects existed between the groups in this study's experimental design, as it employed two groups and had two distributions, each with an average and variation, and post-test-only measures were analyzed.

CHAPTER IV

Results

Experimental design and Procedure

The current study compared the acquisition and retention of previously-unknown

vocabulary definitions of two instructional methods: Direct instruction (DI) of 100%

unknown words, and direct instruction of 100% unknown words combined with rap

assignment (DI+RA). The two groups were tested on their knowledge of these words at

two different times: two weeks after the instruction (Post-Test 1), and four weeks after

Post-Test 1 or six weeks after initial treatment (Post-Test 2). To provide an overview of

the differences between the two groups, a descriptive analysis was conducted. Then, the

two post-test outcomes were computed separately with one-way Analysis of Variance

(ANOVA) to test the following hypotheses:

- H_1: Participants in Group 1 would demonstrate the acquisition of a statistically significant greater number of definitions than participants in Group 2, at the time of Post-Test 1.

- H_2: Participants in Group 1 would demonstrate greater retention of word definitions than participants in Group 2, at the time of Post-Test 2.

Descriptive Statistics

Table 2 shows that the mean acquisition of definitions for Group 1 is higher than

the mean for Group 2 (M = 6.33 vs. 5.46, respectively) in Post-Test 1. Group 1 also

retained more definitions than Group 2 (M = 5.79 vs. 2.92, respectively) in Post-Test 2.

Group 1's retention of definitions between the two tests was higher than Group 2's

(91.5% vs. 53.5%, respectively). Group 1 participants acquired slightly more definitions

than Group 2 participants (M = 6.33 vs. 5.46, respectively) at the time of Post-Test 1.

Additionally, Group 1 retained approximately 50% more definitions than Group 2 at the time of Post-Test 2 (M = 5.79 vs. 2.92, respectively).

Group 1's acquisition results were not correlated with the age of the participants ($r = .06$) and very weakly with their gender ($r = .23$). Boys acquired slightly more definitions (M = 7.0) than girls (5.5). Similarly, the group's retention results were not correlated with the participants' ages ($r = .15$) and weakly with their genders ($r = .29$). Boys retained slightly more definitions (M = 6.8) than girls (4.8). Group 2's acquisition results were weakly correlated with the age of the participants ($r = .33$) but not correlated with their genders ($r = -.06$). Older participants in this group were slightly more likely to acquire definitions. Similarly, the group's retention results weakly correlated with the participants' ages ($r = .25$) and genders ($r = .29$).

Table 2
Descriptive Statistics (Mean and Standard Deviation) Comparing Groups 1 and 2 at Post-Test 1 and Post-Test 2.

Descriptive Statistics

	Groups	Mean	Std. Deviation	N
Post-Test1	Group1	6.33	3.714	24
	Group2	5.46	4.064	24
	Total	5.90	3.877	48
Post-Test2	Group1	5.79	3.730	24
	Group2	2.92	2.653	24
	Total	4.35	3.516	48

Data Analysis

A one-way between subjects ANOVA was conducted to compare the effect of instruction on acquisition of word definitions and retention of word definitions in direct instruction and direct instruction plus rap assignment conditions. There was not a significant effect of type of instruction on number of definitions learned at the p<.05 level at post-test 1, thereby rejecting H_1 [F(1, 46) = .606, p = .440]. There was a significant effect of type of instruction on number of definitions retained at the p<.05 level at post-test 2, thereby accepting H_2 [F(1, 46) = 9.47, p = 0.004]. Post hoc comparisons were not conducted because there were fewer than three groups. These results suggest that the combination of direct instruction and rap assignment is more effective than direct instruction alone for the long-term retention of newly learned word definitions.

Table 3
One-way ANOVA results

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Score on Posttest1	Between Groups	9.188	1	9.188	.606	.440
	Within Groups	697.292	46	15.159		
	Total	706.479	47			
Score on Posttest2	Between Groups	99.188	1	99.188	9.470	.004*
	Within Groups	481.792	46	10.474		
	Total	580.979	47			

* Indicates statistical significance at p<.05

Chapter V

Discussion

Summary of the Study

The primary purpose of this dissertation was to determine whether a culturally-relevant instructional method could facilitate the acquisition and retention of novel vocabulary word definitions among a sample of African American, low-income middle school students enrolled in a charter school in northern New Jersey. The study sought to add to the limited number of empirical research studies on specific methods of vocabulary instruction in the middle school, and to contribute to the existing literature on culturally-relevant instruction with urban, culturally-diverse students. Additionally, as the majority of studies reviewed in preparation for this dissertation proved to be either conceptual or qualitative in design, this study sought to add data-driven research on culturally-relevant instruction in the urban classroom to the existing literature.

The secondary purpose of this study was to empower participants with the knowledge that their affiliation with hip-hop culture can have a place in the mainstream classroom, and that functional vocabulary can be developed and strengthened through the time-honored tradition of rapping. The research was designed to engage students in learning vocabulary in a potentially enjoyable way based on the principles of culturally relevant pedagogy. Although the findings, discussed below, were somewhat contradictory, the treatment can be considered to have been successful at creating an environment wherein students' voices, experiences, and backgrounds were legitimized and promoted as valuable to the classroom, as the data showed significant improvement in vocabulary retention for students who were encouraged to rap. Finally, it was the

researcher's intention to honor students' out-of-school competencies in lyrical composition, or as students would call it, their "spitting skills," as pedagogically relevant and useful to instruction.

This dissertation investigated the plausibility of two hypotheses with a sample of 48 African American, low-income students enrolled in general education classes in grades 6 through 8 in an urban charter school in northeast New Jersey. The first hypothesis proposed that students who were exposed to a culturally-relevant, rap-based instructional method would realize higher scores on a post-test measure of vocabulary acquisition than students in the contrast group, who were instructed with traditional methods. The second hypothesis proposed that students who were exposed to a culturally-relevant, rap-based instructional method would realize higher scores on a post-test measure of vocabulary retention than students in the contrast group. Participants were randomly selected to either group. After a baseline test of vocabulary knowledge, all participants received direct instruction of 15 randomly selected vocabulary words from Coxhead's (2000) Academic Word List and were tested on their knowledge of the target words at two- and six-weeks post-instruction. Students in the treatment group were instructed to write an original rap song using all target words while students in the contrast group were instructed only to study the target words and their definitions. The study's first hypothesis was rejected and the second hypothesis was retained.

The Impact of Direct vs. Culturally-Relevant Instruction on Vocabulary Acquisition

Contrary to the first hypothesis, the study revealed no evidence that the culturally-relevant instructional method surpassed the effectiveness of direct instruction of vocabulary words for short-term learning. Thus, this study's first hypothesis was rejected.

At two weeks post-treatment, students in groups 1 and 2 had acquired a comparable number of novel word meanings, despite method of instruction (M = 6.33 vs. 5.46, respectively). These results contradicted the researcher's hypothesis that rap-based instruction would enhance vocabulary acquisition for hip-hop affiliated youth, but were in line with much of the literature on traditional vocabulary instruction, which supports a direct and explicit approach to teaching word definitions for students of all backgrounds and cultures (Biemiller, 2001; Marzano, 2004; McKeown & Beck, 2004). Although the data did not support the first hypothesis, the results of the first post-test were initially encouraging. Both groups learned at a similar rate, which implied that the rote, systematic instruction that has been criticized as ineffective for children of color (Crain, 2004) can, in fact, be effective with this population. Particularly in light of the current culture of high-stakes testing and accountability set forth by the No Child Left Behind Act of 2001, which some argue has led teachers to replace meaningful teaching with drill-and-repeat instruction that aims to increase standardized test scores (Townsend, 2002), these results would appear to contradict the need for culturally-relevant instruction with African American students of low-income, urban districts. However, the results of the first hypothesis test only indicate that no significant differences existed between the two groups. Other explanations for the results exist and are discussed below.

Although the results of the current study failed to support the first hypothesis, several key issues should be considered when interpreting the results. Critics of definitional instruction as implemented herein have argued that the method is limited in effectiveness for several reasons. First, in order for students to benefit from definitional instruction, they must be exposed to target words frequently, repetitively, and

systematically (Beck, McKeown, & Kucan, 2002; Marzano, 2004). When frequency and repetition is absent from a direct vocabulary instruction program, students' vocabulary acquisition can be attributed to extraneous factors, such as incidental exposure (Smith, 1997). In fact, the literature has suggested that the average student learns 2,800 words per year through exposure and only 200 through direct instruction (Nagy, Herman, & Anderson, 1985). As this study's sample received only one session of direct, definitional vocabulary instruction before the post-tests, it is unclear whether their results can be attributed to either the definitional instruction intervention or to exposure.

Second, definitional instruction rarely allows the student to make multiple, personally-relevant connections to newly learned words, a process that is considered necessary for students to internalize target word meanings for long-term retention (Beck, McKeown, & Kucan, 2002). Indeed, students in this study's direct instruction sample were not required to engage in the meaningful, vicarious interactions with words that promote deeper learning (Phillips, Foote, & Harper, 2008). As such, it was unclear at the time of post-test 1 whether the two groups had similarly developed a true understanding of the target words' meanings or whether their scores could be reflective of other study skills, such as rote memorization skills.

A third criticism of direct instruction can be linked to culture. Those in favor of culturally-relevant instruction assert that for students of diverse backgrounds, skills must be taught within a cultural frame of reference to which students best relate (Duncan-Andrade & Morrell, 2008; Howard, 2010). Direct instruction requires that teachers provide students with dictionary definitions and examples of usage in context (Dixon-Krauss, 2002), which can create confusion for students whose backgrounds are markedly

different from their teachers. Context is relative to experience. If context is provided to a student whose cultural background and experiences are vastly different from his or her teacher's, as was the case for this study's sample of African American, low-income students of a White, middle-class researcher, that student is, in essence, forced to process new information through a foreign lens of reference. Hence, rather than afford the opportunity to link new vocabulary to their existing knowledge and experiences, traditional vocabulary instruction may inadvertently deprive culturally-diverse students of their chances of remembering the newly acquired word definitions over the long-term. Unfortunately, an extensive review of the literature failed to reveal empirical, longitudinal studies on the effects of either direct vocabulary instruction or culturally-relevant instruction on vocabulary retention.

It is unknown whether methodological limitations due to time sampling may have contributed to the first hypothesis being rejected. These methodological limitations are discussed in a subsequent section.

The Impact of Direct vs. Culturally-relevant Instruction on Vocabulary Retention

In contrast to the non-significant results of the measure of vocabulary acquisition (post-test 1), this study's sample's scores on the measure of vocabulary retention (post-test 2) suggested that culturally-relevant vocabulary instruction can enhance word learning when compared to rote definitional instruction. Hypothesis 2 proposed that students who were exposed to the culturally-relevant, rap-based instructional method would remember more vocabulary definitions over time than students in the contrast group, thus demonstrating that deeper processing and meaningful learning had occurred as a result of culturally-relevant instruction. This hypothesis was statistically retained. Six

weeks after intervention, students who were instructed how to learn vocabulary words within the framework of their culture of reference (hip-hop culture) and writing raps, retained a statistically significantly greater number of words at p < .05 than students who were merely provided target words and definitions. Though students in both groups had demonstrated acquisition at a similar level in the short-term, students who were encouraged to explore novel words in a creative, culturally-relevant manner retained approximately 50% more word definitions than their peers in the contrast group (M = 5.79 vs. 2.92, respectively).

Although empirical studies on culturally relevant vocabulary instruction are notably absent among the research, the data support the theoretical underpinnings of culturally-relevant pedagogy. Culturally-relevant pedagogy asserts that the academic achievement of minority students will increase when continuity between their culture of reference (i.e., home and community) and the culture of the schools they attend is established (Gay, 2010). In order to achieve this, academic instruction is aligned with the cultural backgrounds and interests of a particular classroom's student body (Irvine, 2003; Ladson-Billings, 1995; Nieto, 2010). In this study's case, culturally-relevant instruction was aligned with students' affiliations with hip-hop culture. It adopted Ensign's (2003) definition of culture, or "how we do and understand things *around here*…rather than necessarily denoting the characteristics of a larger cultural ethnicity" (p. 415). According to Enyedy and Mukhopadhyay (2007), the way that "relevant" is defined in culturally-relevant pedagogy is relative to individual subsets of students. However, teachers of culturally-diverse students typically choose to design instruction that focuses on: a) linking academic information to students' daily lives, b) choosing content that students

will perceive as valuable to their extracurricular lives, or c) legitimizing students'

existing repertoires as valuable to schoolwork (Enyedy & Mukhopadhyay, 2007). The

use of hip-hop's rapping component as an instructional tool was a deliberate effort by the

researcher to legitimize its pedagogical value. By encouraging students to express

themselves through rap while engaging in a learning activity, this researcher sought to

encourage students to view academic information as pertinent to their extracurricular

lives. Based on this study's sample's scores on the measure of vocabulary retention,

culturally relevant instruction can facilitate genuine learning among urban, African

American students of low socioeconomic backgrounds.

Limitations of the Study

This study presents with several limitations. The first limitation is in the design of

research. The ideal pre-post-test design involves the use of the same instrument for each

assessment. This study utilized a fill-in-the-blank test for the pre-test and a multiple-

choice test for the first and second post-tests. The pre-test design was purposefully

implemented as a baseline measure, to select words that were previously unknown to all

participants before treatment. However, this effort to equate both groups at the beginning

so that any change in knowledge could be linked to the treatment difference resulted in

the quasi-experimental design. Future studies might utilize normed data as baseline

measures of ability and employ a stricter pre- post-test design for more reliable results.

A second constraint to this study relates concomitantly to the participants and

setting. Specifically, the study was conducted at a charter school. In order for a child to

attend the charter school, their parents must be proactively involved in the process. An

application must be completed thoroughly, submitted in a timely fashion, and followed

up with. A significant amount of paperwork is involved, as parents must request

transcripts from students' previous schools and ensure that it reaches the charter school in

time for processing. This process implies investment of time and effort on the part of the

parent and hence greater parental involvement in their child's education. Whereas a

common limitation to students' success in school is lack of parental involvement, this

study's sample may not be representative of the greater population because they had the

implicit advantage of parental involvement. Furthermore, this study's sample may have

been more motivated as a group than a typical classroom sample, as they accepted the

invitation to participate in the study after parental consent was obtained (as indicated by

signed and remitted assent forms). All of the above, in addition to the small sample size

of 48 participants used for this study, are limitations to the study's generalizability to a

greater public school sample in future research.

A third limitation to this study is the lack of standardized data on students. The

availability of district standardized test scores would have shed some light on whether

participants were performing at a level of proficiency at the time of the study and offered

further insight into the data. However, the researcher was not allowed access to this data

by the charter school administration and time constraints were prohibitive to conducting

individualized assessments on each participant, Further, although no participant had been

identified as eligible for special education by the charter school child study team, it is

unknown whether they had undergone an interdisciplinary, standardized assessment for

special services eligibility whilst in the public schools because parents could choose

whether or not to reveal this confidential information at the time their child was enrolled

at the charter school. In future studies, cognitive and reading ability measures should be administered to rule out issues of ability prior to any intervention.

A fourth limitation is the lack of feedback from students. Due to time constraints, exit interviews were not conducted with the groups. It would have been helpful to have information on students' qualitative perceptions of what contributed to their performance. Based on the available data, it cannot be ascertained whether students in the rapping group, for example, enjoyed their assignment more than students in the direct instruction group. As pleasurable activities are linked to greater student involvement and increased motivation to succeed (Weinstein, 2006/2007), this information would have been helpful to understanding the scores of the post-test on retention.

A final limitation is related to time sampling. It is impossible to know what occurred during the interval between instruction and assessments that may have influenced results, such as time spent on studying definitions or practicing raps. Participants were instructed to complete their work independently; as such, there may have been significant discrepancies among each student's time commitment to the project. Also, students in the rap-assignment group were only required to demonstrate that they had completed the project. After the researcher verified that they had written the rap by reading the work, students kept their work. They may have shared their work with other participants, which would involve repeated exposure to word meanings for other participants. This, in turn, could have resulted in practice effects and increased opportunities for incidental learning of target word definitions for some students. To this point, rapping suggests active manipulation of learning material (i.e., reading words, practicing the raps, performing raps for others), which in turn suggests multiple forms of

exposure to the material, including a kinesthetic component. Research generally supports that multiple forms of exposure enhance learning (Francis, Rivera, Lesaux, Kieffer, & Rivera, 2006). Future studies might allow for greater control over extraneous factors by requiring students to complete work in a controlled setting such as a classroom or after-school program. Future studies might also allow for a qualitative analysis of participants' raps.

Directions for Future Research and Professional Practice

This study has demonstrated that the act of writing raps can add value to vocabulary instruction with African American, urban youth in a public school setting. However, although it shed some light on rap music's pedagogical potential, its limitations also underscored the need for future investigation into how rap music can enhance learning in the urban classroom. Given the perpetuated achievement gap between African American and non-minority students, there is a dire need for empirical studies that guide instructional methods for students of color, as well as programs that validate and celebrate their cultural affiliations. Some suggestions for future research and professional applications are offered below.

First, the current study should be extended. Future research should include a larger sample of students in a traditional public school setting to increase generalizability of results. Second, given the widespread popularity of hip-hop, research that examines the feasibility of vocabulary-building rap instruction with students of other minority populations such as Latino disenfranchised and at-risk youth is warranted. Third, as the current dissertation, as well as the majority of the studies reviewed within this dissertation, was conducted with students at the secondary level, future research might

focus on how rap music can build word knowledge among elementary school students to extend the extant literature to a younger population. Fourth, investigators interested in the pedagogical power of rap music might examine how the act of writing raps can increase content knowledge in subjects other than vocabulary (i.e., science or mathematics). Finally, educators who are involved in extracurricular clubs and activities with urban youth might consider designing programs that merge students' interest in hip-hop with academic material to encourage critical thinking activities and develop communication skills. For example, an urban debate team might be formed wherein students would use vocabulary words that they learned during classroom activities to "battle" about socially-conscious issues in a controlled setting.

Conclusion

It has been well-documented that African American students of low-income socioeconomic backgrounds face myriad challenges that begin at birth and continue throughout the lifespan. In infancy and early childhood, the effects of poverty preclude typical development. Inadequate healthcare, exposure to environmental toxins such as lead and asbestos, single-parent households, and a lack of positive role models have each been identified as having the potential to negatively affect a child's ability to learn (Cartledge & Kourea, 2008; Hall, 2007). Adding to existing disadvantages, African American school-aged children are likely to attend schools that are intensely segregated and lack adequate funding and resources, wherein the impact of culture on learning is all but ignored (Orfield & Lee, 2007). Not surprisingly, African American students who begin school at a disadvantage continue to lag behind their peers academically throughout their formal schooling. An alarming number of the estimated 40% of African American

students who do graduate, do so with skills that are inadequate to complete college courses or obtain gainful employment (United States Department of Education, 2003). Efforts to bridge the achievement gap between African American students and their White peers have been in place for decades and results are disappointing. In spite of the No Child Left Behind Act of 2001 (NCLB, 2001), which was designed to ensure that students of all racial and socioeconomic backgrounds would achieve 100% academic proficiency in core subjects by the year 2014, only one out of four African American students in grades 4, 8, and 12 demonstrated basic academic proficiency on standardized measures in 2009 (National Assessment of Educational Progress, 2010).

Perhaps never before has it been so clear that education must be adapted to fulfill the unique needs of African American students. The results of this study indicate that when African American students' cultures of reference are incorporated into academic instruction, meaningful, long-term learning can be facilitated more effectively than when ignored. Further, it is a plea to educators of African American students to recognize that competencies developed outside of school are legitimate and valuable, and can be leveraged for academic instruction in school. In the words of Weinstein (2006/2007), who wrote about the undeniable value of the art of rapping to students' academic development, "Focusing on the intricacies of a genre that gives so many young people so much pleasure, and in which they participate so enthusiastically, can only enrich our understandings of how and why engagements with literacy develop" (p. 281).

REFERENCES

Akom, A. A. (2009). Critical hip hop pedagogy as a form of liberatory praxis. *Equity and Excellence in Education, 42*(1), 52-66.

Alim, S. (2007). Critical hip-hop language pedagogies: Combat, consciousness, and the cultural politics of communication. *Journal of Language, Identity and Education, 6*(2), 161-176.

Allen, B. A., & Boykin, A. W. (1992). African-American children and the educational process: Alleviating cultural discontinuity through prescriptive pedagogy. *School Psychology Review, 21*(4), 586-598.

Allen, B. A., & Butler, L. (1996). The effects of music and movement opportunity on the analogical reasoning performance of African American and White school children: A preliminary study. *Journal of Black Psychology, 22*(3), 316-328.

Alliance for Excellent Education. (2008). *African-American students and U.S. high schools.* Retrieved from: http://www.all4ed.org/files/AfAm_FactSheet.pdf.

Alridge, D. P. (2005). From civil rights to hip hop: Towards a nexus of ideas. *Journal of African American History, 90*(3), 226-252.

Alridge, D. P., & Stewart, J. B. (2005). Introduction: Hip hop in history: Past, present, and future. *Journal of African American History, 90*(3), 190-195.

Ausubel, D. P. (1964). How reversible are cognitive motivational effects of cultural deprivation? Implications for teaching the culturally deprived. *Urban Education, 1,* 16-39.

Baker, S., & Homan, S. (2007). Rap, recidivism and the creative self: A popular music programme for young offenders in detention. *Journal of Youth Studies, 10*(4), 459-476.

Balfanz, R. (2009). Can the american high school become an avenue of advancement for all? *Future of Children, 19*(1), 17-36.

Balfanz, R., & Legter, N. (2004). Locating the dropout crisis. Which high schools produce the nation's dropouts? Where are they located? Who attends them? Retrieved from http://*www.csos.jhu.edu*.

Banks, K. (2006). A comprehensive framework for evaluating hypotheses about cultural bias in educational testing. *Applied Measurement in Education, 19*(2), 115-132.

Banks, J. A., & Banks, C. A. M. (2004). *Handbook of Research on Multicultural Education.* Retrieved from http://www.stanford.edu/~apadilla/PadillaQuantMultiCultural04.pdf

Baumann, J. F., & Graves, M. F. (2010). What is academic vocabulary? *Journal of Adolescent & Adult Literacy, 54*(1), 4-12.

Beck, I. L., McKeown, M. G., & Kucan, L. (2002). *Bringing words to life: Robust vocabulary instruction.* New York, NY: The Guilford Press.

Benner, G. J., Beaudoin, K., Kinder, D., & Mooney, P. (2005). The Relationship Between the Beginning Reading Skills and Social Adjustment of a General Sample of Elementary Aged Children. *Education & Treatment of Children, 28*(3), 250-264.

Biemiller, A. (2001). Teaching vocabulary in the primary grades: Vocabulary instruction

needed. In J. F. Baumann & E. J. Kameenui (Eds.) *Vocabulary instruction: Research to practice* (28-40). New York: Guilford Press.

Boaler, J. (2003). When learning no longer matters: Standardized testing and the creation of inequality. *Phi Delta Kappan, 84*(7), 502.

Borgia, L. (2009). Enhanced vocabulary podcasts implementation in fifth grade classrooms. *Reading Improvement, 46*(4), 263-266.

Bouchard, J. T. J. (2009). Genetic influence on human intelligence (Spearman's g): How much? *Annals of Human Biology, 36*(5), 527-544.

Bowers, A. J. (2010). Grades and graduation: A longitudinal risk perspective to identify student dropouts. *Journal of Educational Research, 103*(3), 191-207.

Boykin, A. W. (1982). Task variability and the performance of Black and White schoolchildren: Vervistic explorations. *Journal of Black Studies, 12*(4), 469-485.

Bronfenbrenner, U., &Morris, P. A. (2006). The ecology of developmental processes. In W. Damon and R. M. Lerner (Eds.), *Handbook of child psychology: Vol. 1: Theoretical models of human development* (993-1028). Hoboken, NJ: John Wiley& Sons.

Brown, M. R. (2007). Educating all students: Creating culturally responsive teachers, classrooms, and schools. *Intervention in School & Clinic, 43*(1), 57-62.

Brown, L., Sherbenou, R. J., & Johnsen, S. K. (1997). Test of Nonverbal Intelligence (3rd ed.). Austin, TX: Pro-Ed.

Brownell, R. (2000a). Expressive One-Word Picture Vocabulary Test (3rd ed.). Novato, CA: Academic Therapy.

Brownell, R. (2000b). Receptive One-Word Picture Vocabulary Test (3rd ed.). Novato,

CA: Academic Therapy.

Bruce, A. M., Getch, Y. Q., & Ziomek-Daigle, J. (2009). Closing the gap: A group counseling approach to improve test performance of african-american students. *Professional School Counseling, 12*(6), 450-457.

Campbell, D. T., & Stanley, J. C. (1966). *Experimental and quasi-experimental designs for research*. Chicago, IL: Rand McNally.

Carrow-Woolfolk, E. (1999). Test for Auditory Comprehension of Language (3rd edition). Austin, TX: Pro-Ed.

Cartledge, G., & Kourea, L. (2008). Culturally responsive classrooms for culturally diverse students with and at risk for disabilities. *Exceptional Children, 74*(3), 351-371.

Chall, J. S. (1987). Two vocabularies for reading: Recognition and meaning. In M. G. McKeown & M. E. Curtis (Eds.). *The nature of vocabulary acquisition* (19-35). Hillsdale, NJ: Erlbaum.

Chen-Hafteck, L. (1997) Music and language development in early childhood: Integrating past research in the two domains. *Early Child Development and Care, 130,* 85-97.

Clay, A. (2003). Keepin' it real: Black youth, hip-hop culture, and Black identity. *American Behavioral Scientist, 46*(10), 1346–1358.

Cooks, J. A. (2004). Writing for something: Essays, raps, and writing preferences. *English Journal, 94*(1), 72–76.

Council for Exceptional Children (2002). *Addressing over-representation of African*

American studentsin special education. Washington, DC: National Alliance of Black Schools Educators.

Coxhead, A. (2000). A new academic word list. *TESOL Quarterly*, *34*(2), 213–238.

Craig-Unkefer, L. A., & Kaiser, A. P. (2002). Improving the social communication skills of at-risk preschool children in a play context. *Topics in Early Childhood Special Education, 22*(1), 3.

Crain, W. (2004). Biased tests. *Encounter, 17*(3), 2-4.

D'Anna, C. A., Zechmeister, E. B., & Hall, J. W. (1991). Toward a meaningful definition of vocabulary size. *Journal of Reading Behavior, 23,* 109-122.

Dagbovie, P. G. (2005). Of all our studies, history is best qualified to reward our research: Black history's relevance to the hip hop generation. *Journal of African American History, 90*(3), 299-323.

Dale, E. (1965). Vocabulary measurement: Techniques and major findings. Elementary English, 42, 895–901.

deVilliers, J. G. (2004). Cultural and linguistic fairness in the assessment of semantics. *Seminars in Speech and Language, 25*, 73–90.

Dimitriadis, G. (2001). *Performing identity/performing text: Hip hop as text, pedagogy, and lived practice.* New York: Peter Lang.

Diorio, G. (2008). No Child Left Behind Act of 2001. *Researcher Starters*, 1-7.

Dixon-Krauss, L. (2002). Using literature as a context for teaching vocabulary. *Journal of Adolescent & Adult Literacy, 45*(4), 310-318.

Dotterer, A. M., McHale, S. M., & Crouter, A. C. (2009). Sociocultural factors and school engagement among african american youth: The roles of racial

discrimination, racial socialization, and ethnic identity. *Applied Developmental Science, 13*(2), 61-73.

Dugard, P., & Todman, J. (1995). Analysis of pre-test post-test control group designs in educational research. *Educational Psychology, 15*(2), 181.

Duncan-Andrade, J. M. R., & Morrell, E. (2005). Turn up that radio, teacher: Popular culture pedagogy in new century urban schools. *Journal of School Leadership, 15*(3), 284-304.

Duncan-Andrade, J. M. R., & Morrell, E. (2008). *The Art of Critical Pedagogy: Possibilities for Moving from Theory to Practice in Urban Schools.* New York: Peter Lang.

Duren Green, T. (2005). Promising prevention and early intervention strategies to reduce overrepresentation of african american students in special education. *Preventing School Failure, 49*(3), 33-41.

Emdin, C. (2010). Affiliation and alienation: Hip-hop, rap, and urban science education. *Journal of Curriculum Studies, 42*(1), 1-25.

Ensign, J. (2003). Including culturally relevant math in an urban school. *Educational Studies, 34*(4), 414-423.

Enyedy, N., & Mukhopadhyay, S. (2007). They don't show nothing I didn't know: Emergent tensions between culturally relevant pedagogy and mathematics pedagogy. *Journal of the Learning Sciences, 16*(2), 139-174.

Executive Summary of NCLB. (2004). Retrieved August 22, 2011 from http://www2.ed.gov/nclb/overview/intro/execsumm.html.

Fang, Z. (2004). *Literacy teaching and learning: Current issues and trends.* Englewood Cliffs, NJ: Prentice Hall.

Ford, D. Y., Harris Iii, J. J., Tyson, C. A., & Trotman, M. F. (2002). Beyond deficit thinking. *Roeper Review, 24*(2), 52.

Ford, D. Y., & Kea, C. D. (2009). Creating culturally responsive instruction: For students' and teachers' sakes. *Focus on Exceptional Children, 41*(9), 1-16.

Forell, K. L. H. (2006). Ideas in practice: Bringin' hip-hop to the basics. *Journal of Developmental Education, 30*(2), 28-33.

Forman, M., & Neal, M. A. (2004). *That's the joint: the hip-hop studies reader.* New York, NY: Routledge.

Francis, D. J., Rivera, M., Lesaux, N., Kieffer, M., & Rivera, H. (2006). *Practical guidelines for the education of English language learners: Research-based recommendations for instruction and academic interventions.* Houston: University of Houston Center on Instruction.

Galton, F. (1869). *Hereditary genius: An inquiry into its laws and consequences.* London: Macmillan.

Garth-McCullough, R. (2008). Untapped cultural support: The influence of culturally bound prior knowledge on comprehension performance. *Reading Horizons, 49*(1), 1-30.

Gay, G. (2007). The rhetoric and reality of NCLB. *Race, Ethnicity & Education, 10*(3), 279-293.

Gay, G. (2010). *Culturally responsive teaching theory, research, and practice.* New York: Teachers College Press.

Gfeller, K.E. (1986). Musical mnemonics for learning disabled children. *Teaching exceptional children. Fall,* 28-30.

Ginwright, S. (2004). *Black in school: Afrocentric reform, urban youth, and the promise of hip-hop culture.* New York: Teachers College Press.

Glenn-Paul, D. (2000). Rap and orality: Critical media literacy, pedagogy, and cultural synchronization. *Journal of Adolescent & Adult Literacy, 44*(3), 246.

Goddard, H. H. (1917). Mental tests and the immigrant. *Journal of Delinquency, 2*, 243–277.

Gonzalez, T., & Hayes, B. G. (2009). Rap music in school counseling based on Don Elligan's rap therapy. *Journal of Creativity in Mental Health, 4*(2), 161-172.

Graham, A., & Anderson, K. (2008). "I have to be three steps ahead": Academically gifted african american male students in an urban high school on the tension between an ethnic and academic identity. *Urban Review, 40*(4), 472-499.

Greenwood, S. C. (2010). Content area readers: Helping middle-level students become word aware (and enjoy it!). *Clearing House, 83*(6), 223-229.

Gregory, A., & Ripski, M. B. (2008). Adolescent trust in teachers: Implications for behavior in the high school classroom. *School Psychology Review, 37*(3), 337-353.

Guttentag, M., & Ross, S. (1972). Movement responses in simple concept learning. *American Journal of Orthopsychiatry, 42*(4), 657-665.

Hall, H. R. (2007). Poetic expressions: Students of color express resiliency through metaphors and similes. *Journal of Advanced Academics, 18*(2), 216-244.

Hallinan, M. T. (2001). Sociological perspectives on Black-White inequalities in

American schooling. *Sociology of Education, 74,* 50-70.

Hammer, C. S., Farkas, G., & Maczuga, S. (2010). The language and literacy

development of head start children: A study using the family and child

experiences survey database. *Language, Speech & Hearing Services in Schools,*

41(1), 70-83.

Hanley, M. S. (1998). *Learning to fly: Knowledge construction of African American*

adolescents through drama. Unpublished doctoral dissertation, University of

Washington, Seattle.

Heilmann, J., Miller, J. F., Nockerts, A., & Dunaway, C. (2010). Properties of the

narrative scoring scheme using narrative retells in young school-age children.

American Journal of Speech-Language Pathology, 19(2), 154-166.

Henfield, M. S., Moore, I. I. I. J. L., & Wood, C. (2008). Inside and outside gifted

education programming: Hidden challenges for african american students.

Exceptional Children, 74(4), 433-450.

Herman, P., Anderson, R. C., Pearson, P. D., & Nagy, W. (1985). *Incidental acquisition*

of word meanings from expositions that systematically vary text features. Urbana:

University of Illinois, Center for the Study of Reading.

Herrnstein, R. J., & Murray, C. (1994). *The bell curve: Intelligence and class structure in*

american life. New York: The Free Press.

Hill, M. L. (2009). *Beats, rhymes, and classroom life: Hip-hop, pedagogy, and the*

politics of identity. New York: Teachers College Press.

Hopkins, A., & Garrett, K. (2010). Separate and Unequal: The underrepresentation of african american students in gifted and talented programs. *Black History Bulletin, 73*(1), 24-30.

Horvat, E. M., & Lewis, K. S. (2003). Reassessing the burden of 'acting White': The importance of peer groups in managing academic success. *Sociology of Education, 76*, 265-280.

Howard, T. C. (2010). *Why race and culture matter in schools: Closing the achievement gap in america's classrooms.* New York, NY: Teachers College Press.

Howard, T. C. (2003). Culturally relevant pedagogy: Ingredients for critical teacher reflection. *Theory Into Practice, 42*(3), 195-202.

Hull, G., & Schultz, K. (Eds.). (2002). *School's out! Bridging out-of-school literacies with classroom practice.* New York: Teachers College Press.

Hyland, N. E. (2005). Being a good teacher of black students? White teachers and unintentional racism. *Curriculum Inquiry, 35*(4), 429-459.

Irizarry, J. G. (2009). Representin': Drawing from hip-hop and urban youth culture to inform teacher education. *Education and Urban Society, 41*(4), 489-515.

Irvine, J. J. (2003). *Educating teachers for diversity: Seeing with a cultural eye.* New York, NY: Teachers College Press.

Jackson, B., & Anderson, S. (2009). Hip hop culture around the globe: Implications for teaching. *Black History Bulletin, 72*(1), 22-32.

Jetton, T. L., & Alexander, P. A. (2004). Domains, teaching, and literacy. In T.L. Jetton & J.A. Dole (Eds.), *Adolescent literacy research and practice* (pp. 15–39). New York: Guilford.

Jones, S. H. (2009). The textbattle and the contention of youth identities online: An ethnographic case study. *German Life & Letters, 62*(1), 96-113.

Justice, L. M., McGinty, A. S., Cabell, S. Q., Kilday, C. R., Knighton, K., & Huffman, G. (2010). Language and literacy curriculum supplement for preschoolers who are academically at risk: A feasibility study. *Language, Speech & Hearing Services in Schools, 41*(2), 161-178.

Kaniuka, T. S. (2009). NCLB, school-based instructional policy and decision-making: A proposed research agenda. *College Student Journal, 43*(3), 787-799.

Keck-Staley, T. L. (2010). The role of human resource capital of black and latino middle schoolers' mathematics identities. *Negro Educational Review, 61*(1-4), 7-40.

Kelley, J. G., Lesaux, N. K., Kieffer, M. J., & Faller, S. E. (2010). Effective academic vocabulary instruction in the urban middle school. *Reading Teacher, 64*(1), 5-14.

Kirkland, D. E. (2008). You must learn: Promoting hip-hop education. *Youth Media Reporter, 2*(1-6), 42-46.

Kozol, J. (1991). *Savage inequalities: Children in America's schools*. New York: Harper Perennial.

Kozol, J. (2005). *The shame of the nation: The restoration of apartheid schooling in America*. New York: Three Rivers Press.

Ladson-Billings, G. (2009). *The dreamkeepers: Successful teachers of African American children.* San Francisco, CA: Jossey-Bass.

Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal, 32*(3), 465-91.

Lane, I. R. (2006). Good teaching: Truth or fiction. *Delta Kappa Gamma Bulletin, 72*(4), 9-12.

Lee, J. (2006). *Tracking achievement gaps and assessing the impact of NCLB on the gaps: An in-depth look into national and state reading and math outcome trends.* Cambridge, MA: The Civil Rights Project at Harvard University.

Lee, J., & Bowen, N. K. (2006). Parent involvement, cultural capital, and the achievement gap among elementary school children. *American Educational Research Journal, 43*(2), 193-218.

Loewy, J.V. (2004). Integrating music, language and the voice in music therapy. *Voices: A World Forum for Music Therapy*. Retrieved from https://normt.uib.no/index.php/voices/article/viewArticle/140/116

Lomotey, K. (Ed.). (2010). *Encyclopedia of African American education.* (Vol. 1). Los Angeles, CA: Sage.

Love, A., & Kruger, A. C. (2005). Teacher beliefs and student achievement in urban schools serving african american students. *Journal of Educational Research, 99*(2), 87-98.

Lovelace, S., & Stewart, S. R. (2009). Effects of robust vocabulary instruction and multicultural text on the development of word knowledge among african american children. *American Journal of Speech-Language Pathology, 18*(2), 168-179.

Lynn, M., Benigno, G., Williams, A. D., Park, G., & Mitchell, C. (2006). Critical theories of race, class and gender in urban education. *Encounter, 19*(2), 17-25.

Marzano, R.J. (2004). *Building background knowledge for academic achievement:*

Research on what works in schools. Alexandria, VA: Association for Supervision and Curriculum Development.

McCollin, M., O'Shea, D. J., & McQuiston, K. (2010). Improving vocabulary and comprehension skills of secondary-level students from diverse backgrounds. *Preventing School Failure, 54*(2), 133-136.

McGrane, M. (2004). Brown v. board of education: "Separate but equal" has no place in our society. *Florida Bar Journal, 78*(5), 8-8.

McKeown, M. G., & Beck, I. L. (2004). Direct and rich vocabulary instruction. In J. F. Baumann & E. J. Kameenui (Eds.) *Vocabulary instruction: Research to practice* (13-27). New York: Guilford Press.

McKinney, E., Bartholomew, C., & Gray, L. (2010). RTI and SWPBIS: Confronting the problem of disproportionality. *Communique Online, 38*(6), 1-8.

McNeese-Ward, M. (2010). Hip hop for HIV awareness. *Texas Public Health Journal, 62*(4), 39-40.

Mercadal-Sabbagh, T. (n.d.) Hip hop stories and pedagogy. Retrieved from http://web.mit.edu/comm-forum/mit4/papers/sabbagh.pdf.

Metro-Roland, D. (2010). Hip hop hermeneutics and multicultural education: A theory of cross-cultural understanding. *Educational Studies, 46*(6), 560-578.

Miller, M., & Veatch, N. (2010). Teaching literacy in context: Choosing and using instructional strategies. *Reading Teacher, 64*(3), 154-165.

Milner, H. R. (2006). Culture, race and spirit: A reflective model for the study of african-americans. *International Journal of Qualitative Studies in Education (QSE), 19*(3), 367-385.

Monroe, C. R. (2005). Understanding the discipline gap through a cultural lens: Implications for the education of african american students. *Intercultural Education, 16*(4), 317-330.

Moore Iii, J. L., Ford, D. Y., & Milner, H. R. (2005). Underachievement among gifted students of color: Implications for educators. *Theory Into Practice, 44*(2), 167-177.

Morrell, E., & Duncan-Andrade, J. M. R. (2002). Promoting academic literacy with urban youth through engaging hip-hop culture. *English Journal, 91*(6), 88–92.

Morrow, R. A., & Torres, C. A. (1995). *Social theory and education: A critique of theories of social and cultural reproduction.* Albany: State University of New York Press.

Morton, M. L., & Bennett, S. (2010). Scaffolding culturally relevant pedagogy: Preservice teachers in an urban university/school collaboration. *Journal of Ethnographic & Qualitative Research, 4*(3), 139-150.

Murray, C., & Greenberg, M. T. (2001). Relationships with teachers and bonds with school: Social emotional adjustment correlates for children with and without disabilities. *Psychology in the Schools, 38*(1), 25.

Murray, C., Waas, G. A., & Murray, K. M. (2008). Child race and gender as moderators of the association between teacher–child relationships and school adjustment. *Psychology in the Schools, 45*(6), 562-578.

Nagy, W. E., & Anderson, R. (1984). The number of words in printed school English. *Reading Research Quarterly, 19,* 304-330.

Nagy, W. E. & Herman, P. A. (1987). Breadth and depth of vocabulary knowledge:

Implications for acquisition and instruction. In M. G. McKeown & M. E. Curtis

(Eds.). *The nature of vocabulary acquisition* (19-35). Hillsdale, NJ: Erlbaum.

Nagy, W. E., Herman, P. A., & Anderson, R. (1985). *Learning word meanings from*

context: How broadly generalizable? Urbana: University of Illinois, Center for

the Study of Reading.

Nagy, W. E., & Scott, J. A. (2000). Vocabulary processes. In M. L. Kamil, P. Mosenthal,

P. D. Pearson, & R. Barr (Eds.), *Handbook of reading research* (Vol. 3, pp. 269-

284). Mahwah, NJ: Erlbaum.

National Center for Education Statistics. (n.d.). The NAEP reading achievement levels by

grade. Washington, DC: National Assessment of Educational Progress. Retrieved on

August 28, 2011 from http://nces.ed.gov/nationsreportcard/reading/achieveall.asp.

National Reading Panel. (2000). Teaching children to read: An evidence-based

assessment of the scientific research literature on reading and its implications for

reading instruction, Retrieved June 17, 2011 from

http://www.nichd.nih.gov/publications/nrp/smallbook.htm

Neil, M. (2004). Leaving no child behind: Overhauling NCLB. In D. Meier & G. Wood

(Eds.), *Many children left behind* (pp. 101-119). Boston: Beacon.

Nelson, R. F., & Rogers, P. (2003). Supporting African American preschool teacher's use

of developmentally and culturally appropriate practices. *Multicultural*

Perspectives, 5(3), 39.

Neuman, S. B., & Dwyer, J. (2009). Missing in Action: Vocabulary Instruction in Pre-K.

Reading Teacher, 62(5), 384-392.

Newman, M. (2005). Rap as literacy: A genre analysis of hip-hop ciphers. *Text, 25*(3), 399-436.

Nieto, S. (2010). *The light in their eyes: Creating multicultural learning communities.* New York, NY: Teachers College Press.

No Child Left Behind of 2001, P. L. No. 107–110 (January 8, 2002).

Noguera, P. (2003). The significance of race in the racial gap in academic achievement. *In Motion Magazine*, 1-4.

Noguera, P. (2007). Rethinking the standards and accountability of No Child Left Behind. *In Motion Magazine*, 1-3.

Ntiri, D. W. (2009). Framing the literacy issue: Correcting educational misrepresentations in U.S. society. *Western Journal of Black Studies, 33*(4), 231-239.

Ogbu, J. (1994). Collective identity and the burden of "acting white" in black history, community and education. *The Urban Review*, *36*(1), 1-17.

Orfield, G., & Lee, C. (2007). Historic reversals, accelerating resegregation, and the need for new integration strategies. A report of the Civil Rights Project/Proyecto Derechos Civiles, Los Angeles: University of California, Los Angeles.

Pardue, D. (2007). Hip hop as pedagogy: A look into "heaven" and "soul" in são paulo, brazil. *Anthropological Quarterly, 80*(3), 673-709.

Parsons, E. C., & Travis, C. (2005). The black cultural ethos, students' instructional context preferences, and student achievement: An examination of culturally congruent science instruction in the eighth grade classes of one african american and one euro-american teacher. *Negro Educational Review, 56*(2/3), 183-204.

Patterson, J. A., Hale, D., & Stessman, M. (2007). Cultural contradictions and school leaving: A case study of an urban high school. *High School Journal, 91*(2), 1-15.

Pershey, M. G. (2010). A comparison of african american students' self-perceptions of school competence with their performance on state-mandated achievement tests and normed tests of oral and written language and reading. *Preventing School Failure, 55*(1), 53-62.

Peterson, P., & West, M. (2003). The politics and practice of accountability. In P. Peterson & M. West (Eds.), *No child left behind? The politics and practices of school accountability* (pp. 1-22). Washington, DC: Brookings Institution.

Phillips, D. C. K., Foote, C. J., & Harper, L. J. (2008). Strategies for effective vocabulary instruction. *Reading Improvement, 45*(2), 62-68.

Pressley, M. (2000). What should comprehension instruction be the instruction of? In M. Kamil, P. Mosenthal, P. D. Pearson, & R. Barr (Eds.), *Handbook of reading research* (Vol. 3). Mahwah, NJ: Lawrence Erlbaum Associates.

Prier, D., & Beachum, F. (2008). Conceptualizing a critical discourse around hip-hop culture and black male youth in educational scholarship and research. *International Journal of Qualitative Studies in Education (QSE), 21*(5), 519-535.

Reynolds, C. R., & Kamphaus, R. W. (Eds.). (2003). *Handbook of psychological and educational assessment of children: Intelligence, aptitude, and achievement.* New York, NY: The Guilford Press.

Rovai, A. P., Jr, L. B. G., & Wighting, M. J. (2005). Cultural and interpersonal factors affecting african american academic performance in higher education: A review

and synthesis of the research literature. *The Journal of Negro Education, 74*(4), 359-370.

Russell, M. L. (2005). Untapped talent and unlimited potential: African american students and the science pipeline. *Negro Educational Review, 56*(2/3), 167-182.

Ruston, H. P., & Schwanenflugel, P. J. (2010). Effects of a conversation intervention on the expressive vocabulary development of prekindergarten children. *Language, Speech & Hearing Services in Schools, 41*(3), 303-313.

Sanacore, J., & Palumbo, A. (2010). Middle school students need more opportunities to read across the curriculum. *Clearing House, 83*(5), 180-185.

Sánchez, D. M. (2010). Hip-hop and a hybrid text in a postsecondary english class. *Journal of Adolescent & Adult Literacy, 53*(6), 478-487.

Seon-Young, L., Olszewski-Kubilius, P., & Peternel, G. (2010). Achievement after participation in a preparatory program for verbally talented students. *Roeper Review, 32*(3), 150-163.

Shiller, J. (2009). "These are our children!" An examination of relationship-building practices in urban high schools. *Urban Review, 41*(5), 461-485.

Skiba, R. J., Knesting, K., & Bush, L. D. (2002). Culturally competent assessment: More than nonbiased tests. *Journal of Child & Family Studies, 11*(1), 61-78.

Skiba, R. J., Simmons, A. B., Ritter, S., Gibb, A. C., Rausch, M. K., Cuadrado, J., & Choong-Geun, C. (2008). Achieving equity in special education: History, status, and current challenges. *Exceptional Children, 74*(3), 264-288.

Smith, C. B. (1997). Vocabulary instruction and reading comprehension. *Eric Digest.* ED 412-506.

Smith, D., & Smith, B. (2009). Urban educators' voices: Understanding culture in the classroom. *Urban Review, 41*(4), 334-351.

Somers, C. L., Owens, D., & Piliawsky, M. (2008). Individual and social factors related to urban african american adolescents' school performance. *High School Journal, 91*(3), 1-11.

Somers, C. L., Owens, D., & Piliawsky, M. (2009). A study of high school dropout prevention and at-risk ninth graders' role models and motivations for school completion. *Education, 130*(2), 348-356.

Spradlin, L. K., & Parsons, L. D. (2008). *Diversity matters: Understanding diversity in schools.* Belmont, CA: Thomson Wadsworth.

Spring, J. (2003). *Deculturalization and the struggle for equality: A brief history of the education of dominated cultures in the United States.* New York, NY: McGraw Hill.

Stewart, E. B. (2007). Individual and school structural effects on african american high school students' academic achievement. *High School Journal, 91*(2), 16-34.

Stillwell, R. (2009). *Public School Graduates and Dropouts From the Common Core of Data: School Year 2006–07.* National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.

Stockman, I. J. (2010). A review of developmental and applied language research on african american children: From a deficit to difference perspective on dialect differences. *Language, Speech & Hearing Services in Schools, 41*(1), 23-38.

Stovall, D. (2006). We can relate: Hip-hop culture, critical pedagogy, and the secondary classroom. *Urban Education, 41*(6), 585–602.

Tatum, A. W. (2000). Breaking down barriers that disenfranchise african american adolescent readers in low-level tracks. *Journal of Adolescent & Adult Literacy, 44*(1), 52.

Tatum, A. W. (2005). Teaching reading to black adolescent males: Closing the achievement gap. Portland, ME: Stenhouse Publishers.

Taylor, C., & Taylor, V. (2007). Hip hop is now: An evolving youth culture. *Reclaiming Children & Youth, 15*(4), 210-213.

Terman, L. M. (1916). *The measurement of intelligence.* Boston: Houghton Mifflin.

Terry, N. P., Connor, C. M., Thomas-Tate, S., & Love, M. (2010). Examining relationships among dialect variation, literacy skills, and school context in first grade. *Journal of Speech, Language & Hearing Research, 53*(1), 126-145.

Tickner, A. B. (2008). Aquí en el ghetto: Hip-hop in colombia, cuba, and mexico. *Latin American Politics & Society, 50*(3), 121-146.

Townsend, B. L. (2002). "Testing while black". *Remedial & Special Education, 23*(4), 222.

Trochim, W. M. K. (2000). Research methods knowledge base. Retreived August 29, 2011, from http://www.socialresearchmethods.net

Trumbull, E. (2001). *Bridging cultures between home and school.* Mahwah, NJ: Erlbaum.

Turner, E. E., Gutiérrez, M. V., Simic-Muller, K., & Díez-Palomar, J. (2009). "Everything is math in the whole world": Integrating critical and community knowledge in authentic mathematical investigations with elementary latina/o students. *Mathematical Thinking & Learning, 11*(3), 136-157.

Urban, W. J. (1992). *Black scholar: Horace Mann Bond, 1904-1972.* Georgia: University of Georgia Press.

Uwah, C. J., McMahon, H. G., & Furlow, C. F. (2008). School belonging, educational aspirations, and academic self-efficacy among african american male high school students: Implications for school counselors. *Professional School Counseling, 11*(5), 296-305.

Vallas, R. (2009). The disproportionality problem: The overrepresentation of black students in special education and recommendations for reform. *Virginia Journal of Social Policy & the Law, 17*(1), 181-208.

Vanneman, A., Hamilton, L., Baldwin Anderson, J., and Rahman, T. (2009). *Achievement Gaps: How Black and White Students in Public Schools Perform in Mathematics and Reading on the National Assessment of Educational Progress.* National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.

Vaughn, S., Cirino, P. T., Wanzek, J., Wexler, J., Fletcher, J. M., Denton, C. D., . . . Francis, D. J. (2010). Response to intervention for middle school students with reading difficulties: Effects of a primary and secondary intervention. *School Psychology Review, 39*(1), 3-21.

Villegas, A. M., & Lucas, T. (2002). *Educating culturally responsive teachers*. Albany, NY: State University of New York Press.

Walker-Dalhouse, D., & Risko, V. J. (2008). Learning from literacy successes in high-achieving urban schools. *Reading Teacher, 61*(5), 422-424.

Weinstein, S. (2006). A love for the thing: The pleasures of rap as a literate practice. *Journal of Adolescent & Adult Literacy, 50*(4), 270-281.

White, C., & McCormack, S. (2006). The message in the music: Popular culture and teaching in social studies. *Social Studies, 97*(3), 122-127.

Wickens, C. M., & Sandlin, J. A. (2007). Literacy for what? Literacy for whom? The politics of literacy education and neocolonialism in UNESCO- and world bank-sponsored literacy programs. *Adult Education Quarterly, 57*(4), 275-292.

Wiggan, G. (2008). From opposition to engagement: Lessons from high achieving african american students. *Urban Review, 40*(5), 317-349.

White, T. G., Graves, M. F., & Slater, W. H. (1990). Growth of reading vocabulary in diverse elementary schools: Decoding and word meaning. *Journal of Educational Psychology, 82*(2), 281-290.

Williams, A. D. (2007). The critical cultural cypher: Hip-hop's role in engaging students in a discourse of enlightenment. *Dissertation Abstracts International, 68*(08). (UMI No. 3260489).

Wren, S. (n.d.). *Vocabulary.* Retrieved from http://www.balancedreading.com/vocabulary.html.

Yeh, S. S., & Connell, D. B. (2008). Effects of rhyming, vocabulary and phonemic awareness instruction on phoneme awareness. *Journal of Research in Reading, 31*(2), 243-256.

Young, C. Y., Wright, J. V., & Laster, J. (2005). Instructing african american students. *Education, 125*(3), 516-524.

Zirkel, S. (2005). Ongoing issues of racial and ethnic stigma in education 50 years after

brown v. board. *Urban Review, 37*(2), 107-126.