Teachers' Perceptions of Educators' and Students' Role in Closing the Achievement Gap

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Abstract
Closing the achievement gap is an issue that continues to be discussed in many educational roles. This article reviews perceptions from educators and students relative to strategies and techniques for closing the gap. Many factors and variables, which widen the gap, are discussed with suggested solutions.

"Let us think of education as the means of developing our greatest abilities, because in each of us there is a private hope and dream which, fulfilled, can be translated into benefit for everyone and greater strength for our nation."

- John F. Kennedy

In education, the "achievement gap" refers to the inequalities in academic performance between groups of students generally categorized by socioeconomic status (SES), race, ethnicity, and gender. Research into the causes of disparities in student achievement between low-income minority students and middle-income white students has been ongoing in the United States since the publication of the report, "Equality of Educational Opportunity" in 1966. This report, also known as the "Coleman Study," was ordered by the U.S. Department of Health, Education, and Welfare to evaluate the availability of equal educational opportunities to children of varying race, color, religion, and origin. The authors found that 85% of Blacks who stayed in school until their senior year score below the national average in comparison to White students (Viadero, 2014).

The National Center for Education Statistics began its assessments in the early 1970s. Since its inception, the Center has been the main source of nationwide achievement data. Each year, the Center reports the results of the National Assessment of Educational Progress' (NAEP) mathematics assessment, which gauges student mathematics achievement in grades 4, 8, and 12 (NCES, 2009).

Historically, trends in mathematics achievement data suggest a gap exists between minority and White students, and statistical evidence proposes this gap may be widening. The National Assessment of Educational Progress 2009 and 2011 national assessment results showed that black and Hispanic students continue to trail about two grade levels behind white peers, scoring an average of more than 20 test-score points lower on the National Assessment of Educational Progress (NAEP) math and reading assessments at 4th and 8th grades. NAEP's analysis of results on 2009 national tests found math scores of black boys were comparable with math scores of black girls in the same grades. However, on the same assessments, black boys fell behind Hispanics males and females, and lagged behind Caucasian boys by a minimum of 30 points, which can be interpreted as three grade levels behind (Gabriel, 2010).

Furthermore, NAEP reported reading scores of African American boys in eighth grade only a little better than the scores of white girls in fourth grade. NAEP maintains that on average, Black students score one standard deviation below White students on standardized tests, and in its 2009 analysis, NAEP recorded the national math average for African American fourth graders at 222 points, compared to 248 points for White students (Kirp, 2010).

Studies propose black boys, commonly, fall behind from their earliest years, and by the time a student enters kindergarten, math and reading achievement gaps are present. The U.S. Department of Education's Early Childhood Longitudinal Survey of Kindergarten children (ECLS-K) and other kindergarten entry exams estimate the black-white gap in early childhood ranges from a little less than half a standard deviation to a little more than 1 standard deviation, and by fifth grade, the gap has broadened by nearly two full years(Rouse, Brooks-Gunn, & McLanahan, 2005).

Similarly, Prager (2011) suggests a cognitive gap is present in African American boys as early as nine months of age, and widens by 24 months. There is an assertion about a "school readiness" gap existing between black and white students from the moment they start school, and children who perform poorly on cognitive skills' tests prior to kindergarten have a high probability of never catching up. Challenges facing young black males in America and placed emphasis on the early years in the development of students' cognitive, communication, and mathematical skills, as well as their social and emotional competence was examined. Prager recommended a strong need for early childhood involvement, specifically in the first three years of life.

Factors Contributing to the Achievement Gap

Socioeconomic Factors

In a 2009 study, White reviewed three socioeconomic factors: poverty, nutrition, and self-esteem that had a serious impact on the academic achievement of African American males. Research has shown children who are poor generally lack proper nutrition, adequate medical care, and consistency and continuity in the home. Furthermore, poor children enter school with

weaker language skills due to a lack of exposure to enhanced vocabulary and limited access to books and reading material in the home. Therefore, living in poverty is an environmental stressor that has a negative impact on a child's emotional, academic, and social development.

Exterior Factors

Prager examined media's influence on African American males' self–concept. The study asserted many African American boys get their view of what a man should be from television, magazines, newspapers, and the internet. The media often portrays Black males as violent, disrespectful, over sexualized, and threatening. Regrettably, words such as unmotivated, unwilling, and incapable have been associated with the Black male. The adverse images of Blacks seen on television and in video games shape teachers' views of African American male students, and, in turn, negatively impacts how teachers treat Black males and how they distribute learning opportunities (2011).

Schools' Impact

Schools truly make a difference in the lives of students. The low mathematics achievement levels of minority students, particularly Black male students, may be an indicator of the instruction these students are receiving, and more importantly, the talent and skill of the individuals delivering the instruction. Research shows that teacher efficacy is the single most important element affecting student learning. Effective teachers can either widen or narrow the achievement gap on standardized assessments that divide White and minority students (Beatty, 2013).

Additionally, schools with less qualified teachers and fewer resources are more likely to lag behind academically. Schools that have high teacher turnover and high teacher absences are not getting the necessary results. In addition, schools that do not employ highly qualified teachers and that have large class sizes have also influenced student achievement (Beatty, 2013).

Teachers' Perceptions

Teachers form their expectations and perceptions of students as a function of students' gender, race, and social class. Research, as stated by Bol and Berry (2005), found that teachers' expectations and perceptions significantly impacted sixth grade students' scores on a standardized mathematics test. Studies established that teachers expect three times more from White students than from Black. Bol and Berry recounted another study in which African American male, middle school aged students fell victim to decreased opportunities offered by their classroom teachers due to lowered expectations. Black males received limited recommendations to advanced mathematics courses, and their achievement was negatively affected by their teachers' negative beliefs of them as learners.

Students' Attitudes and Perceptions

Noble (2011) questioned African American males in order to investigate the impact of participants' self-concept and individual views on motivation and mathematical achievement at

the postsecondary level. One study participant reported he was often criticized by other Black males because he was the highest performing African American male student in school. The participant reported he had to be careful when talking about his success in school because other Black male students made fun of him for what they thought was trying to be "better" than them. A second study participant reported he often "dumbed down" when he was around African American friends for fear of acting too smart. Also, the participant noticed if he hung out with a certain set of Black friends too long, he began to adopt their negative attitudes.

Similarly, White (2009) examined the African American males' attitudes about schooling and the impact their attitudes had on student achievement. It was found African American males' attitudes concerning achievement were often formed by how their schools and their peers viewed them. When schools and teachers failed to "tap into" and develop Black male students' many talents, discounted their goals and aspirations, disregarded their ability to learn, and limited their opportunities and choices in the learning environment, countless Black boys, crushed by school systems that consistently ignored them and what they had to offer, gave up, refused to try, and ultimately, became disengaged.

Narrowing the Gap

Benefits of Early Childhood

The outcomes of three groundbreaking long-term studies: the Perry Preschool study, which followed a group of at-risk black children in Michigan in the mid-60's; the Abecedarian study, which enrolled children of low socioeconomic status in Chapel Hill in the early 1970's; and the Chicago Longitudinal Study, which began collecting data on children from its poorest neighborhoods at the Chicago Child-Parent Centers in the 1980's have been positively reported. In each case, children who enrolled in a high-quality early-education program were tracked into adulthood, and their life paths were compared with those of a matched control group. Each study highlighted the importance of investing in early education as a way to narrow the achievement gap for African American children (Kirp, 2010).

It was established that African Americans who attended Head Start were significantly less likely to have been retained or placed in special education classes. They also yielded lower crime rates, were less reliant on welfare, and were more likely to have completed high school, to have earned a GED, to have enrolled in college, to have some work experience, and to have stayed healthy. There were no reported specifics for Black males included in the article, but the research did show African American children and children of poverty made the most gains from Head Start attendance (Kirp, 2010).

What Parents Can Do

Prager highlighted parents as the first teachers by exposing children to a variety of experiences, which enable them to better connect with the curriculum. It was suggested that, by simply spending quality time with children, giving them attention, hugging them, and telling them they can be successful, parents instilled confidence in their children, which, in turn, increased students' confidence in their academic abilities (2011).

Parents can support their children in school by monitoring homework as well as other academic activities and interests, by placing limits on unhealthy and unproductive activities, by being involved, and by regularly communicating with teachers and other school officials. White (2009) recorded, when African American parents are actively involved in their children's schooling, they increase the odds of their son or daughter being successful in school.

What Schools Can Do

Butler, Shillingford, and Alexander-Snow (2011), placed emphasis on student beliefs and perceptions in relation to African American academic accomplishment. Their study suggested African American students show significant academic improvement when they feel a sense of belonging in the school community. In comparison, the study claimed students who feel a sense of connectivity within the school community may be more likely to display higher self-esteem and experience more positive educational outcomes in the classroom. It was established African American students feel more accepted in environments where their differences are respected and appreciated, and males are more apt to report feelings of belonging when they feel accepted and valued by others, are involved in school activities, and when they recognize similarities in cultural distinctions within the school community.

Academics greatly benefitted when teachers formed strong social bonds with African American students and students displayed considerable increases in engagement and self-esteem. The study found that in order to facilitate growth of African American students in the area of math, teachers must believe they can teach and reach Black students, and they must believe in these students and have high expectations for them. In addition, educators must pay close attention to the needs of African American students, and must hold them accountable for their academics and learning (Butler et al., 2011).

Additional instructional time was also observed as an effective classroom strategy in improving students' academic performance. As indicated by a report on high-performing and high-poverty schools, institutions that consistently find ways to provide additional instructional time for their students, especially in the areas of reading and math, have been the most successful. In addition, there is a need for schools to incorporate classroom practices that draw meaningfully on the culture, languages, and experiences African American students bring to school each day in order to increase engagement and academic achievement for students of color (White, 2009).

What Teachers Can Do

Research states teachers affect what students learn and how much they learn, and schools are critical sites for young Black males as they make meaning of who they are, what they are supposed to do, and how others perceive them. Therefore, teachers' beliefs of students are often what they believe of themselves regarding academics. Good teachers make lasting imprints on student achievement that can last for several years (White, 2009).

White (2009) referenced a 2001 study that assessed three major culturally responsive strategies used by highly qualified African American teachers with majority African American students: holistic, culturally communicative, and skill building. According to the study, teachers who generate the best results with Black students are culturally relevant and generally sincere

with and respectful of African American students. These teachers also have high expectations for all learners.

White's (2009) study advocated for teachers to include techniques in their lesson plans that allow African American students to use their language, communication, and discussion skills. Skill building assisted students in developing and improving their academic knowledge base and abilities.

Students' Perceptions about Learning

Berry and Thunder (2012) shed light on a previous study which qualitatively examined the insights and opinions of five male African American high school students. In this study, students gave their individual perceptions of what pedagogy they felt worked well for them in the mathematical learning environment. Students reported mathematical learning was improved, and they were more engaged when they were allowed to be involved in classroom activities, when math was interesting, exciting, and fun, and when competition was involved. Study participants unanimously found cooperative learning, group work, and classroom discussion beneficial in facilitating their understanding of mathematical concepts.

In a separate, but comparative study, Berry, Thunder, and McClain (2011) studied the perceptions of successful Black male students. The study examined the identities of eight Black fifth through seventh grade boys who were considered successful in mathematics as measured by high pass rates on state standardized mathematics assessments and by above average grades in the mathematics classrooms. It was noted how Black boys perceive each other and themselves and how these perceptions affect the students' academic achievement. The participants in this study believed they and other African American males could be successful at math if they followed directions, worked together, had a desire to learn, and were intelligent. The authors concluded African American boys must meet mathematical challenges, be motivated to succeed in the classroom, and must foster strong beliefs in their mathematical ability.

Summary

Educators have always been challenged to close the achievement gap between targeted groups of students. In some states, like Arkansas, there is a law for educators and community members to meet twice a year to discuss this gap and to generate ideas for narrowing this divide between groups of students (Protho, Bequette, Garner, & Harder, 2013). Many times community members can think of strategies outside of the educational classroom to assist. Sometimes educators cannot see the forest for the trees. Educators deal with the whole child every day and many problems are encountered other than curriculum issues. These problems take precedence for the school to run smoothly.

Closing the achievement gap primarily affects poor and minority students. This gap was first measured in the 1970s and has existed for over thirty years. The achievement gap spans numerous educational indicators, such as; test scores, graduation and dropout rates, grades and college entrance rates (D'Amico, 2001).

Many superintendents have named closing the achievement gap a top instructional priority. As a superintendent in Arkansas for eight years, author Dr. Webb points out three

aspects of the achievement gap that stand out. They are: 1) the performance gap which illustrates the discrepancies between the educational achievement and the performance of students, 2) the resource gap among the students who have had many educational opportunities and experiences outside the classroom, and 3) the willingness gap of educators and legislators who can make a difference, but turn their head to the inequities of our educational system. The gap begins with our preschool children and grows wider as they enter kindergarten, elementary school and secondary school. When dropout rates are reviewed, this gap may be the reason for the increase in numbers. Many of these students are living in low socio-economic conditions.

Educators must develop a vision for closing the achievement gap and develop goals to meet the vision. The goals must include successful transitions between every grade level that proceed smoothly for the students, the parents and the educators. Rigor must be incorporated into the curriculum so the student will be ready for the transition. The curriculum must be created for students to always want to be lifelong learners. Educators must develop relationships with students to be able to meet all of their individual needs in the classroom. Students must feel safe and secure within the classrooms so they can concentrate on the curriculum. The relationship between the school and the community must be strongly connected to strength the lifelong learning experiences so every student will be successful. Schools must provide quality professional development so teachers will be strengthened and adequately prepared to deliver excellent teaching for every student. Teachers must be provided resources for their classrooms to improve student achievement. The entire school must work together to alleviate the gap that is occurring for all students to overcome the statistics and for every student to achieve excellence.

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