

Causes of and Solutions to the Achievement Gap: Teachers' Perceptions

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Abstract

Survey results from 874 educators regarding the achievement gap are shared. The importance of the achievement gap, causes of and solutions to the achievement gap, and performance expectations for students in their schools are explored. Implications for teacher educators are discussed as related to both pre-service and in-service training programs.

Due to the impact of the No Child Left Behind Act (2002), much attention has been drawn to the fact that some sub-groups of public school students across our nation do not achieve as well as their classmates. As Anderson, Medrich, and Fowler (2007) explained, understanding the causes of achievement gaps and how to correct those causes is a very complex issue because 1) schools who have closed the gap were not necessarily the highest performing schools, 2) schools closing the achievement gap were not necessarily making AYP, 3) schools making annual yearly progress (AYP) were not necessarily closing the achievement gap, and 4)

comparisons across states were inappropriate due to the variety of state standards and assessments. The research discussed in this article was the first stage of a year-long collaborative research project. This initial phase was designed to gain insight into educator perceptions related to various aspects of the achievement gap. The results of this inquiry are important because, as Uhlenberg and Brown (2002) suggested, teachers must first examine and look beyond their personal assumptions before they can understand and act on the existing reality.

Issues Associated with the Achievement Gap

There are conflicting viewpoints explaining why the achievement gap exists. A myriad of both possible causes and solutions related to the achievement gap have been cited in the literature. Issues related to educational factors and home and community factors have all been studied.

Educational Factors

Although research has been inconclusive, reducing class size has long been suggested by educators as an answer to increasing student achievement (Grissmer, Flanagan, & Williamson, 1998). After an extensive review of the research, Ehrenberg, Brewer, Gamoran, and Willms (2001) concluded that placing more emphasis on teaching aptitudes and content knowledge of perspective teachers paid greater dividends and was more beneficial than reducing class size. As Jones, Yonezawa, Mehan, and McClure (2008) noted, efforts to improve schools that led to higher student achievement addressed needed changes in educators' beliefs, values, and attitudes; however, it was noted that these factors cannot be addressed in isolation.

Over-reliance on standardized testing has been criticized by Kohn (2001) who suggested that an overwhelming proportion of the variance in standardized scores

was due to the socioeconomic status of the students taking the test. Thus, determining why some schools have higher performing at-risk students while others do not have such success was an extremely difficult undertaking. Roderick (2001) reported that students and teachers worked harder and students were more motivated when student achievement on standardized tests was tied to grade level promotion.

Student behaviors determined by educators to be disruptive or inappropriate have also been cited by several researchers as major factors related to the achievement gap (Dee, 2005; Gregory, Skiba, & Noguera, 2010). Miles and Stipek (2006) noted that students who struggled academically often experienced frustration that led to disruptive behavior in the classroom. Dee (2005) also found that gender, racial, and ethnic differences between teachers and their students impacted the achievement gap. These differences greatly increased the probability of students being perceived by their teachers as being inattentive, of not completing homework assignments, and of exhibiting disruptive behavior. Teachers' perceptions that students seemed unmotivated or exhibited a lack of effort in the school setting has been related gaps in performance.

Home and Community Factors

In a survey of African American and Caucasian teacher perceptions, Uhlenberg and Brown (2002) reported that all teachers, regardless of race, tended to believe that income and parenting techniques were important factors that contributed to the achievement gap. In a similar study, Bol and Berry (2005) surveyed a variety of educators to elicit their perceptions. The classroom teachers in this group consistently selected nonacademic factors, student motivational levels, student work ethic, and family/parent support, whereas, teacher supervisors and university

faculty agreed that classroom instructional practices such as quality curriculum and instruction were the key factors. A study conducted by Lee and Bowen (2006) found that teachers reported lower academic achievement among students who were living in poverty, students living with parents who were less educated, and students who were non-white. A meta-analysis of the effects of comprehensive school reform on student achievement reported that between 25% and 50% of the black-white achievement gap could be attributed to parental, home, and community factors (Gorey, 2009).

Several studies have indicated that students from lower SES families were perceived to be less capable than students from higher SES families (Auwarter & Aruguete, 2008; Hamilton, Sherman, & Rulvolo, 1990; Jussim 1991, 1986). Evans and Rosembaum (2008) suggested that children living in low SES homes had more difficulty learning to control their emotions and behaviors which hindered their ability to achieve at higher levels in academic settings. Moreover, Benner and Mistry (2007) reported that the academic achievement of low SES children could be negatively affected by poor adult expectations.

Recently, researchers have found that family income was highly correlated to differences in children's development. These differences were impacted by the fact that more affluent families typically spent seven times as much on their children's development as do less affluent families (Kornrich & Furstenberg, 2013). Moreover, Evans and Rosenbaum (2008) suggested that affluent parents provided more cognitively stimulating environments for their children which were characterized by numerous opportunities for informal learning, conversations, and exposure to a greater number of books. Reardon (2013) reported that children from more affluent families typically had two parents both having college educations; in contrast, children from less affluent families were more likely living with a single

mother having a low level of education.

Closing the Achievement Gap

Heckman (2011) reported that early intervention was required to offset the economic and social disadvantages that contributed to the achievement gap. Heckman also noted that such interventions needed to begin earlier than formal schooling because the characteristics that impact this gap occurred at or before birth. Additionally, Reardon (2013), who also supported the need for early interventions, found that closing the achievement gap was multi-faceted, requiring the formation of social policies that provided family support to ensure students have stable, secure homes and neighborhoods as well as educational policies that promoted cognitive and social development.

Several researchers have used surveys to identify possible solutions that teachers believe would help close the achievement gap. A survey of Black and White teachers' perceptions of the causes and solutions to the achievement gap conducted by Uhlenberg & Brown (2002) identified four possible solutions most frequently selected by teachers that could effectively bridge the achievement gap. These included 1) provide more tutoring, after school, and summer programs for students, 2) increase use of school social workers and resource teachers to communicate with the home, 3) give teachers more training in diversity issues and sensitivity, and 4) reduce class sizes. Bol and Berry (2005) surveyed middle level and high school mathematics teachers to determine what factors they believed contributed to the achievement gap and their suggestions for reducing the achievement gap. The teacher responses were categorized into four overarching themes including, policies, professional development and teacher characteristics, curricular changes, and societal influences and community building. Some specific

responses provided by the teachers were 1) reducing class size, 2) grouping students by ability, 3) professional development for teachers related to content, pedagogy, and working with minority and poor students' families, 4) changing the curriculum, and 5) educating parents. The following research questions guided the current study:

- (1) Do teachers perceive the achievement gap to be an important issue facing teachers today?
- (2) What do teachers perceive to be the major causes of the achievement gap?
- (3) What do teachers perceive to be possible solutions for closing the achievement gap?
- (4) Do teachers believe that their students have the ability to achieve?

Method

This article reports the results of an online survey completed by teachers focusing on their perceptions and expectations of student achievement. The forced-choice survey was constructed using a modification of Uhlenberg and Brown's *Educators' Perceptions of the Achievement Gap* (2002). The findings reported here are from the first phase of a larger study analyzing the achievement gap existing in elementary and middle schools in a large Southeastern school district.

Participants

Respondents included 874 (88.4% female, 11.6% male) teachers from a large school district serving a diverse population serving both urban and rural communities. Of the respondents, 91.3% ($n=798$) reported they were Caucasian; 4.3% ($n = 38$) reported they were African American, and 4.3% ($n = 38$) reported as other. Teachers reported having 15.9 (SD=10.2) years of experience as an educator.

Measure

The online survey for this study asked respondents to identify, from a list of four issues, the most important one facing educators. Respondents were then asked to rank four different sets of four potential causes and solutions to the achievement gap using a four point Likert-scale. Finally, respondents were asked how they perceived the achievement of their students and all other students in their school.

Data Analysis

In order to answer the research questions, a simple mean was used to report the results of the survey. When educators failed to respond to an item or gave more than one item the same ranking, the results were eliminated.

Results

Perceived Importance of the Achievement Gap

According to the survey data, respondents felt the most significant issue facing educators today was the achievement gap ($m=3.30$, $SD = 0.86$). The remaining issues, in order, were teacher salaries ($m=2.98$, $SD = 0.98$), ending social promotion ($m=2.13$, $SD = 0.97$), and teacher shortage ($m=2.01$, $SD = 1.08$).

Major Causes of Achievement Gap

The survey results indicate that teachers accepted no, or limited, control over these causes. Note, even though disruptive/inappropriate student behavior was listed as a significant cause, types of discipline used by teachers were not perceived to be a significant cause of the achievement gap (See Appendix A).

Possible Solutions for Closing the Achievement Gap

Here again, the teachers chose solutions that ere outside their immediate

purview. Table 1 provides the four solutions most frequently chosen by the respondents. Similar to the responses related to causes, respondents chose possible solutions for the achievement gap that are outside the teachers' purview.

Table 1. *Highest Average Ranking for Causes of and Solutions to Differences in Student Achievement*

Items	N	M (SD)
Causes of differences in student achievement		
Parenting techniques used by the family	600	3.53 (0.78)
Students often behaving in disruptive/inappropriate manner	572	3.24 (0.95)
Lack of student motivation	558	3.09 (0.99)
Low family income level	579	3.06 (1.08)
Solutions to differences in student achievement		
Reduce class size	562	3.58 (0.77)
Make students more accountable for their performance	536	3.22 (0.92)
Make tutoring, after-school and summer school programs more available	559	3.12 (.096)
Use a method of assessment other than standardized tests for students identified as high risk	561	2.52 (1.18)

Performance Perceptions

Teachers tended to agree that the teachers in their school believe that most

students are able to master basic reading and math skills ($m=3.44$, $SD=0.70$).

Moreover they tended to agree that their students will perform at about the state level in academic achievement ($M=3.12$, $SD=0.76$), and that most of their students will achieve at or above grade level by the end of the year ($m=3.08$, $SD=0.84$).

Discussion

Over all, the findings from this survey support the earlier work of Uhlenberg and Brown (2002). Of the four choices offered on this survey, teachers identified the achievement gap as more importance than teacher salaries, ending social promotion, and the teacher shortage. Clearly, the teachers in this study firmly believed the achievement gap is a significant issue facing educators today. This is critical because in order to make progress in closing the achievement gap educators must see it as an important issue.

There were four factors identified by the teachers in this study as having an impact on the existence of the achievement gap, (i.e., parenting techniques, student misbehavior, lack of student motivation, and low family income, support earlier research findings. For example, Gorey (2009) and Uhlenberg and Brown (2002), also found that educators cite parenting techniques as a contributing factor to the achievement gap. The research of Gregory, Skiba, and Noguera (2010); Miles and Stipek (2006); and Dee (2005); indicated that educators feel the gap is related more to student behavior. Roderick (2001) and Stipek's (1993) work points to student motivation. Finally, research from Auwarter and Aruguette (2008), Lee and Bowen (2006), Kohn (2001), and Jussim (1991, 1986) show a link to low family income. The findings of this study concur with the previously cited research in that the factors educators most often selected as contributing to the achievement gap were those over which they felt they had very little control.

Furthermore, the teachers polled in the current study reported that the solutions to the achievement gap had little to do with instructional skills or the type of instruction, the types of discipline used by teachers, or the need for educators to provide better reciprocal communication with the home. Instead, as seen in Table 1, these educators felt class size, student accountability, availability of tutoring along with after school programs, and the need to find an alternative to the required state tests were the key solutions. As related to class size being a solution, these findings do support Grissmer, Flanagan, & Williamson (1998), but disagree with those of Ehrenberg et al (2001). Furthermore, these findings support the position of Kohn (2001) who stated that measures other than standardized testing should also be used to determine academic progress. Again, as with the causes previously discussed, the solutions were factors over which teachers had limited control.

The analysis of the final section of the survey, Performance Perceptions, provided evidence that, as a group, these teachers believed nearly all their students, as well as the other students in the school, would perform above average on state tests. Moreover, they believed most teachers in their schools shared the same beliefs. This finding, along with the fact that they saw the achievement gap as a significant issue, is very important. Obviously, to make progress closing the achievement gap, teachers need to both acknowledge the achievement gap is an important concern and have faith that their students are capable of performing well on standardized assessments (Jones et al, 2008).

Limitations

The limitations of this research include using forced choice options for prompts which did not allow respondents to provide their own rationale for the causes of or possible solutions for the achievement gap. Partial rankings and tied rankings were

removed from the data analysis, decreasing the sample size and increasing the potential for bias.

Implications for Teacher Education

Teacher education programs are developed to meet the standards of the teaching profession which emphasize the importance of candidates' ability to continuously reflect on their practice in order to improve the educational experience for all students (NCATE, 2008). For teacher educators who work with both pre-service and in-service teachers, it should be a concern that teachers in the current study primarily looked to factors outside of the classroom for both causes and solutions to the achievement gap as opposed to seeing the significance of instruction, management, teachers' willingness to develop reciprocal relationships with families, and other teacher qualities as factors impacting the achievement gap. The authors do not suggest that teachers should see themselves as the cause of the achievement gap; however, they must see themselves as a catalyst in the creation of learning environments that will bridge this gap.

Teacher educators need to inform both pre-service and in-service teachers about research focusing specifically on the achievement gap. Teacher educators have the responsibility to ensure that teacher candidates acquire the skills needed to create reciprocal relationships with families and communities to help diminish the impact of poverty on children's ability to be successful. Teacher educators need to challenge all teacher candidates, both initial and advanced level, to look more closely at their contributions to the learning environment and the affect this may have on students' ability to achieve. Pre-service and in-service teachers must receive training that provides the needed skills in behavior management, motivational techniques, and innovative instructional methods that will support the

development of optimal learning environments for all students.

For schools to have a positive impact on closing the achievement gap, teachers must believe that they are part of the solution. The teachers in this study believed that students needed to be held more accountable for their own success. Teachers and teacher candidates should hold themselves to the same level of accountability if we are to decrease the achievement gap. Unless all teachers accept the fact that the quality of the classroom learning environment can greatly impact student achievement, teachers cannot help their students be as successful as possible.

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