Closing the achievement gap between African American children and their Caucasians counterparts using collaboration learning setting

The underachievement of a large and growing scale of African American children is nothing short of national crisis, according to Haycock (2001) in her research on closing the achievement gap. Haycock indicates that by the year 2010, Black and Hispanics will compromise approximately fifty percent of the school population. This is an alarming situation and everyone should take it seriously since fifty percent of the future school population is not going to be performing as desired; it is really a national crisis. There is a growing body of literature about closing the achievement gaps among students of different backgrounds in public education. Some of it will be analyzed, and the implication of the theory that teaching and learning should focus on children's particular intelligences in order to increase the achievement of minority children will be discussed.

Why there is an Achievement Gap in Public Schools

As long as there is diversity in schools, achievement gaps among students are inevitable. In fact the gender difference, the ethnic origin, the ability, the primary language, and the socioeconomic factor constitute the cause of low performance and achievement gaps among students. It is a known fact that African Americans, Asians, Hispanics and whites have respective historical backgrounds, family values, cultures and other values that can promote higher level performance and thus raise achievement scores, and also those that can bring negative consequences and thus, lower achievement scores. Worth mentioning are also others variables that are impediments to academic achievement such as poor student attitude, low self-esteem, lack of parental support,

stereotype threat (Steele, 1999) and lack of appropriate teaching approaches geared toward motivating students who are likely to miss the train.

Singled out as a group, African American students have been stereotyped to be low achievers based on the result of the standardized tests. Stereotype is said to be a generalized image of a person or group, which does not acknowledge individual differences and which is often prejudicial to that person or group. With such a growing and diverse population at school, students are not expected to bring the same values and attitudes, and learning experiences and styles. Each one is unique and has his/her own character and ways of looking at things. Therefore, it is challenging, if not impossible, to deliver the promise that no one will be left behind (underachievement is obvious), since every child brings to school his or her unique world view and sense of his or her place in the world.

Closing the Achievement gaps among students of different backgrounds is one of the hot topics in public education nowadays. There is a growing body of literatures that deal with this topic. Even the focus of President Bush's administration in education revolves around the same topic. In the No Child Left Behind Act, every child is to be measured up to the established standard. The reality of this mandate is that while there are improvements in some schools, the majority of schools are still struggling to close the achievement gap. Some schools provide additional instruction in the form of after-school programs that consist of more of the same instruction students have had during the day. In general, the majority of failures are found among socio-economic disadvantaged students. Black students and Hispanic students are the most affected

groups, and schools need to multiply strategies to effectively teach all students in order to level the educational playing field.

To close the achievement gap, a closer look at the historical perspective of African American students (where they come from and where they are going) is critical in finding the appropriate remedy. Certainly, diversity poses some negative influence on students' performance at school if the interdependence among students does not promote collaboration, trust, and mutual understanding. The curriculum could provide one of the solutions in public schools struggling to teach different ethnic groups. It is true that having multiple curricula in the same public schools is not feasible; however, the integration and differentiation of instructional delivery would be a step toward improvement.

This diversity of world views profoundly impact the way teachers relate to each student, as well as how teachers relate to one another. Becoming more adept at meeting the needs of African American students requires that educators become more aware of the African American experience in America, as well as the life experiences of these children. Educators must form more authentic relationships with the African American community (Denbo & Beaulieu, 2002). Denbo and Beaulieu suggest that to improve results for African American students, care must be taken to ensure there is a focus on individual students who are struggling as well as with the larger trust toward school change. They do not suggest that programs that are already working for some students be abandoned or canceled, but for no one to be left behind, new strategies should be implemented.

According to Gardner (1983), the implication of the theory is that learning/teaching should focus on the particular intelligences of each person. For example, if an individual has strong spatial or musical intelligences, they should be encouraged to develop these abilities. Gardner points out that the difference intelligences represent not only different content domains, but also learning modalities. Gardner's (1999) recent definition of intelligence is, "a bio-psychological potential to process information that can be activated in a cultural setting to solve problems or create products that are of value in a culture."

A further implication of the theory is that assessment of abilities should measure all forms of intelligence, not just linguistic and logical-mathematical. It is a sad truth that most assessments in public schools rely on the above two mentioned domains noted, linguistic and logical-mathematical. For schools that would like to make difference in teaching the twenty first century generation, multiple intelligences approach should be used in classroom. Recent studies show that cultural backgrounds may discourage some students from active participation in the classroom, and also some stereotypes (as far as African American students are concerned) are to be considered, but for the sake of bridging the achievement gaps, only those that can be considered as positive assets, or contributors to the implementation of the strategies for raising the achievement level, will be cited below: (i) Many African American students respond highly to cooperative learning. (ii) Many African Americans have an outer-directed rather than an egocentric focus. (iii) Many African American students are more active and less able to adjust to the sedentary learning environments of American schools. (iv) Many African American students prefer and are interested in working with people. (v) Many African American

students like to work in groups. (vi) Many African American students are sensitive to and responsive to what others feel and think and consider how their actions may affect others. (vii) Many African American students prefer to maintain close proximity to other students. (viii) Many African American students react intensely to being praised or criticized. (ix) Many African American students function better under cooperative conditions. (x) Many African American students learn much better when the curriculum is humanized, attributing human characteristics to concepts and principles. (xi) Many African American students respond better to rewards such as praise, smiles, pats on the back, and the like (Ford, Obiakor & Patton, 1995).

According to Nieto (1992), a considerable measure of academic peril for these students is created by teachers' diverse cultural ineptness, improper attitudes, and differential behaviors toward African American students. Where educators are aware and have tried to remedy the situation, results are amazing.

McKinley (2003), speaking about instructional variables for classroom implementation, suggests that teachers use multicultural approaches to the instruction, engage in collaborative team teaching, demonstrate knowledge of cultural, ethnic, linguistic, gender diversity in classroom, understand aspects of own culture that facilitate or hinder communication, use curriculum materials that describe historical, social, political events from a wide range of racial, ethnic, cultural and language perspectives, and in order to maintain active participation of students, call one very particular student regularly, and frequently call for extended substantive oral and written responses. This is to say that care should be taken to consider diversity in the classroom (or to the greater

extent, at school) and use a teaching approach appropriate to all individuals, ability and intelligences.

Gardner (1983) would even put it better: "Learning activities should cater for the whole range of intelligences or be tailored to the intelligences of specific learners." He demonstrates different types of intelligence: musical intelligence, bodily-kinesthetic intelligence, logical-mathematical intelligence, linguistic intelligence and special intelligence. This implies that each individual student may have a different type of intelligence, a different background, different ability and attitude, and may bring a different luggage to the learning community. If the teaching material is tailored in a way that students can learn from each other and teach each other, act together and support each other, the outcome could be rewarding. Students would celebrate their differences and engage in a harmonized learning process that draws them nearer and brings commitment and responsibility sharing. It is an approach that calls for cooperation between students, as one can see.

In this approach students at various performance levels work together in small groups toward a common goal" (Gokhale, 1995). Leonard (1998) states in her article, "Why Malik Can't 'Do' Math," that closing the testing gap among black and white students requires that teachers examine their pedagogy and use a variety of strategies to improve the participation and achievement of students of color. She alludes to variables stated above, notably poor student attitude, low self-esteem, lack of parental support, and low socioeconomic status as reasons for low achievement. And in Malik's case, it is mostly his attitude toward schooling or taking this particular course that hinders his performance. But when he was put in the working condition that offered him the

opportunity to interact and give his opinion, he was ready to cooperate and enjoy the setting (the way the learning material was presented). This enhanced his achievement, improved his self-esteem and boosted his motivation for learning; "doing math." Providing opportunities for students to discuss their mathematical thinking improves African American students' self-esteem, attitude toward mathematics, enrollment in advanced courses, and academic performance (Hollins, Smiler & Spencer, 1994). Malik was put in different conditions before, and things seemed not to work for him. A paradigm shift on the part of the teacher helped ignite Malik's motivation and let him realize that since he is awake, he can see. A change of strategy and cooperation with his peers helped him change his attitude toward math.

Taking into account the stereotypes of African American students mentioned above, the appropriate learning delivery suitable to African American students would be collaborative learning. This is a different form of teaching as compared to the traditional approach that focuses on competition and individualistic learning approaches. While the traditional approach requires that everybody work at his or her own pace, trying to do the best they can to succeed and acquire the knowledge and skills during the learning process, collaborative learning is the one approach that does not require power or authority but empower the student with cooperative impulse and willingness to learn and teach others. With this approach, students look at schooling through different lenses; lenses of trust, mutual understanding and commitment to the group. This form or teaching has been referred to by different names, with distinctions among them, including: cooperative learning, collaborative learning, collective learning, learning communities, peer teaching, peer learning, reciprocal learning, team learning, study

circles, study groups and work groups. There are three general types of group work: informal learning groups, formal learning groups and study teams (Johnson, Johnson, & Smith, 1991).

While diversity may have negative impact on achievement and productivity, it can also have positive impact. The work of Johnson and Johnson on cooperative learning shows how diversity can work for the good of all students. Diversity can fulfill its promise rather than be a problem when learning situations and schools are structured cooperatively. This begins with diverse students being brought together in the same classroom, the teacher using cooperative learning procedures the majority of the time, the principal organizing teachers into collegial support groups aimed at increasing their expertise in using cooperative learning and working together as a team, and the superintendent organizing administrators into collegial support groups aimed at increasing their expertise in leading a cooperative school and working together as a team (Johnson, Johnson & Stanne, 2000). The benefit is that people from different cultural and ethnic heritages come to know each other better, and understand each other and interact while working together. And with these contacts and personal interactions with other group members, students learn what the other members' strengths and weaknesses are in order adjust their ways of handling things when they interact.

Diversity is seen as an asset, and members of the group, while working together collaboratively are cast as allies that value each other and look at their differences as strengths. When students work in a collaborative setting they develop the passion for working together as a team, supporting each other, caring for each other and being responsible for the good of the group. They become culturally aware and cherish the

learning moments even more than before. Their mental health, self-esteem, ability to act independently and exert their autonomy, their interpersonal and small-group skills and their understanding of interdependence and cooperative efforts are boosted (Johnson, Johnson & Stanne, 2000).

Collaborative learning gives students very important advantages not forthcoming with traditional instruction because a group--whether it be the whole class or a learning group within a class— can accomplish meaningful learning and solve problems better that any individual can alone (Tizman, Jones, Fennimore, Bakker, Fine & Pierce, 1990). Wiersema (2000), who used collaborative learning in her classroom, indicates that it has been and will be a rewarding experience. Wiersema defined collaborative learning as a "philosophy of working together, building together, learning together, changing together and improving together. This philosophy, she adds, can be applied to any situation and life condition. If different people learn to work together in the classroom, then the will become better citizens of the world. It will be easier for them to interact positively with people who think differently, not only on the local scale but also worldwide. The implementation of collaborative learning philosophy in the learning/teaching process has and will revolutionize education and have a great impact in society. Advocate of this form or teaching/learning praise the work of the Johnson brothers and characterize it as the only way any member of a group, be it a classroom, a team, a community of the society at-large, can come to learn about others, their strength and weakness, their expectation, their worldviews, their learning strategies, their cultural values and their priorities in life. This diversity makes it easier for everyone to know where to step and what is required of them as a contribution for the common good of the community. And

working collaboratively, individuals learn how to share responsibilities and seek outcomes that are beneficial to themselves and to the all group members. The values resulting from cooperation are: (i) commitment to the common good, (ii) joint effort, (iii) facilitating, promoting, and encouraging the success of others, (iv) the success of one is the success of others and a reason for rejoicing, (v) everyone has value, (vi) friendship and commitment (lifelong commitment), (vii) self-worth is unconditional, (viii) interest and motivation in order to learn, grow, develop and succeed, (ix) diversity is a strength and not a weakness (Johnson, Johnson, and Holubec, 1993).

Collaborative learning is used and is promising to be widespread in every working, learning and social situation in this culturally diverse world. Medical workers, salesmen, educators, students and people from a whole array of professions and occupations need that kind of partnership, collaboration and cooperation in order to function effectively. Cultural competence will enable them to know how to relate to each other, understand the others' life styles, expectations and ways of handling situations according to their origin and culture. This facilitates their interaction and involvement in groups, working place, and society and breaks down cultural barriers. One can imagine what the implications of this strategy would be in schools if implemented with multiculturalism and multiple intelligences in mind. A great deal of literature about collaborative learning presents the advantages of this method as compared to the traditional method that uses competition and individualistic learning approaches. Advocates of the collaborative methods and researchers dealing with bridging the achievement gaps allude to considering students' cultural differences, multiple intelligences and learning styles, and where this has been done, students attained high

level of performance, participation, motivation and achievement score were boosted.

Collaborative learning encompasses a variety of group learning experiences, such as peer tutoring, student-faculty research projects, short-term buzz groups, learning communities, and other techniques (Cooper, Robinson & McKinney, 1994).

The research of Johnson, Johnson and Stanne (2000) indicates that there are more than 900 validations regarding the effectiveness of cooperative learning over individual efforts. These validations held regardless of the fact that the research spanned many countries, cultural background, socioeconomic class, age, or gender. Researchers have focused on such diverse outcomes ranging from self-esteem and reduction of stereotypes to the internalization of values and quality of the learning environment. It is doubtful if there is another educational strategy that has successfully demonstrated success across so many diverse outcomes.

What is expected of schools is that all kinds of minds (Levine, 1993) be addressed and that educators (psychologists, pediatricians, and learning specialists) meet and collaborate by comparing their notes, learning from each other as they interpret their finding to ensure that they understand the whole student. They should further identify students' strengths, affinities, and weaknesses and recommend strategies to overcome these weaknesses. We can find out through tests how students approach different parts of learning and academics in order to see what specific strategies would work. During this process, teachers should observe, describe, and respond to their students' needs. That is to say, "teachers should base their teaching methods on their understanding of how learning works, while students are expected to be learning about learning while

applied so that learning goes in all directions (students teaching students, students teaching teachers, teachers teaching teachers, and teachers teaching students). Everyone interacts and learns from everyone else, and during the process students gain insight and track their own progress and developmental profiles.

Using collaborative approaches, dramatic changes will occur and this is what will be noticed in schools: (i) Schools that work together with parents and join forces to create and sustain efforts for all students. (ii) Schools in which all students acquire and build unique expertise and develop their affinities. (iii) Schools that make available multiple education pathways in executing activities. (iv) Schools that help kids blaze their own trails for motor success, creativity and community service. (v) Schools that provided students with mentors from the faculty or from the community. (vi) Schools that help to educate parents about diversity of intelligences and how they function and how they take care of a mind at a time. (vii) Schools that accept and maintain educational plans for each student. (viii) Schools that refuse to label their students (in order to eliminate stereotype threat). (ix) Schools that allow students to learn at their own pace. (x) Schools that offer a range of ways in which students can reveal their knowledge and their academic accomplishments. (xi) Schools that seek to be far less judgmental of students.

In schools like these, teachers will profoundly influence students and will be remembered with fondness and gratitude, for their personality will have impinged decisively on their students and unleashed the "winning self" that was latent in their students. From a "zero," a student who was an underachiever becomes a "hero," doing wonders in the domain where he or she did not even think good things could happen.

Parents will be supportive of such schools and will be glad to entrust their children into teachers' hands and thus, work open-mindedly will them for a common goal: that of imparting knowledge to the students and for the advancement of the community in which they live. As research and findings reveal, the only durable way that African American students can see the playing field leveled for them to do as well as their peers, and without any fear, is through collaborative learning. For this is a beneficial pathway for both the learners that they are and the educators.

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