The Diversity Project
A Different Look at Professional Development

By Michael Rossi, Ph.D

Abstract
Dr. Michael Rossi, Superintendent of Lopatcong Township School District, used a quasi-experimental study to test the effect of educational interventions on faculty knowledge and attitude toward diversity and academic achievement. The research was designed to compare the knowledge and attitude change of respondent public school teachers depending on the level of intervention related to cultural diversity. Two experimental groups and a control group were administered a pre and post intervention survey.

The study showed that as teacher knowledge increased, so did positive attitude toward diversity. Furthermore, both teacher knowledge and positive attitude toward diversity increased as the level of educational interventions increased. Student artifacts from the study (pictures, journals and a “coat of arms” produced at the final event) indicated that students gained valuable insights into a community they knew little about prior to the study. Student artifacts also demonstrated that they learned how people are more similar than not, and that differences are something to embrace. As a result of the effort, the district established an annual artist in residence program, aimed at diversity, and enhanced its character education and cultural arts programs.

Introduction
The Diversity Project was an educational exchange program that brought together two different K-8 school communities, the Lopatcong Township School District, located in Lopatcong Township, New Jersey, and the Avon Avenue School, located in Newark, New Jersey. Both districts have similar student to teacher ratios, student to computer ratios, and student to
administrator ratios. However, the demographics and socioeconomics of the two communities are much different. The Lopatcong Township School District is located in suburban Warren County, and serves a community that is predominantly (93 percent) white and has a low poverty rate. The Avon Avenue School is located urban Newark and serves a community that is mostly persons of color and has a high poverty rate. The Avon Avenue School is more than 100 years old while Lopatcong Township School District is less than 10 years old. At the time of the Diversity Project, the student participants from Lopatcong had rarely (if ever) spent any time in Newark and the students from Newark, had not spent any time in Lopatcong. Thus, the dichotomy provided the perfect backdrop for a diversity project.

As Lopatcong Township School Superintendent, I envisioned a program that would enable teachers and students to meet, visit, and participate in a variety of activities with individuals whose educational and other experiences were different from theirs. The idea was to link together students and teachers, who, on the face of it were worlds apart. I imagined that under the right circumstances, these seemingly disparate groups would discover that they shared more similarities than differences. Moreover, I hypothesized that with the right educational interventions, all participants would raise their knowledge and improve their attitudes regarding diversity. I had previously forged a professional relationship with Dr. Antoine Gayles, principal of Avon Avenue School, when we both were part of a Seton Hall University Superintendent training program. During the spring and summer of 2006, Gayles and I explored the possibility of working collaboratively on a diversity effort that became The Diversity Project.

**Background of the Study**

Three goals were developed for the Lopatcong School District action research project. The first goal was to increase teacher knowledge and improve teacher attitude regarding diversity. The second goal was to provide students with opportunities to discover similarities and embrace differences with students from the partner school. The third goal was to create an ongoing dialogue about diversity issues and infuse an overall diversity initiative into the curriculum, values and mission of our district. In order to accomplish our objectives, I had to get several critical components in place. First, the district needed a partner school that would provide a complementary demographic to ours, thus affording our students and staff the chance to interact with persons whose background and experience were different from theirs. Second, the district
needed to create different experiences that could be measured for their effectiveness, which was essential to the research design. Third, the district needed to create an instrument that could be used to assess the significance of those experiences. Finally, the district needed to find a funding source for all the above.

For Lopatcong Township School District, diversity often represents itself in a subtle and quiet manner. While the school is steadily becoming more diverse, there is neither one particular age, nor one particular race, nor one particular issue that drove this initiative. It is a relatively small suburban district (900 students) that often does even have enough of any particular subgroup to warrant reporting on No Child Left Behind (NCLB) related items. In fact, having smaller “pockets” of diverse learners (English-as-a-second-language students, students of color, and economically disadvantaged students), typically not at levels large enough to secure NCLB funding, makes it harder to serve those students. I thought it critical though, that I launch a diversity program, because it is not acceptable to let even one child fail. It was my belief that connecting with an urban district through an exchange program, one designed to utilize educational interventions, would engender the type of appreciation necessary to enhance our understanding of diversity and how it relates to student achievement. We found that district in Avon Avenue School, and after a few meetings with their administration, we forged a partnership toward this endeavor.

After securing a partner school to join us in this venture, Dr. Gayles and I held a series of brainstorming sessions to map out “The Diversity Project,” as it was ultimately called. We needed to craft a design that would provide connections for both faculty and students. Our discussions led us to the determination that we would offer a progression of experiences for our teachers and students. Those experiences would focus on current research on diversity, and how that research related to the teaching and learning process. It was during the examination of that research that teacher workshops and the survey instrument were developed.

With three of the four pieces in place, we needed to secure funding to cover the costs of professional speakers for the teacher workshops, substitute teachers, transportation, meals, materials, and to run the statistical analysis of the survey results. I investigated a variety of funding sources and ultimately applied for and received a Geraldine Dodge Foundation grant. In authoring the grant we framed out the project around the concept of “systematic change in your
school,” which we hoped would result for both Avon and Lopatcong. Armed with a partner school that was about as different from ours as possible, a plan to provide teachers and students with a rich exchange of ideas, a survey instrument to gauge knowledge and attitude change, and the funding to pay for it, The Diversity Project was underway, in the summer of 2006.

**Review of the Literature**

In preparing the conceptual framework for this project I needed to become familiar with current research and “best practices” within the field of diversity education. The key aspects were to increase teacher knowledge, improve teacher attitude, and focus on how to maximize learning opportunities for all students. Another focal point of the research was to illuminate and deconstruct several myths that relate to educational practices, and to hone in on instructional strategies that would be effective for all learners. Moreover, it was important to target what factors both within and connected to the school experience influence academic performance. My hope was that we could find certain patterns within the research that would help us effectuate change in our teaching and learning, and to create or improve upon structures, policies and systems. Essentially, our goal was to improve the cognitive and affective responses of teachers as they relate to diversity studies.

As I reviewed the topic of diversity and the achievement gap, I discovered some dominant themes coming out of the literature. For the purposes of this study I placed them into three categories: structures and environment; myths and realities; and statistics about the achievement gap. These three areas, while certainly not absolute, reflect a realistic representation of the literature. The three areas helped us capture the essence of what we were trying to accomplish through the grant and enabled me to draft the survey instrument. They also fostered the development of separate knowledge (cognitive) and attitude (affective) domain questions, a critical piece of the project. Most important, it became apparent through the literature that there is not one single concept that will dramatically change the academic lives of students. Rather, the research suggested that success would come when teachers and administrators embraced a combination of strategies to create the optimal classroom experience.

The notion of establishing an appropriate learning environment is certainly nothing new. However, authors continuously address the lack of “fundamental components” as reasons why students, especially poor students and students of color, keep on failing. Dr. Pedro Noguera, New
York University Professor of Teaching and Learning, has written extensively about how even in schools with the worst reputations, one can find teachers who have created a classroom environment in which problems of race and socioeconomic status have been overcome through a “humane environment” (Siegel, 2002). Likewise, Noguera points out through his research that schools can raise achievement levels for all students if they establish clearly defined norms, have high expectations, and create and maintain “mutual accountability” between the school and parent (Noguera, 2003). At the heart of this notion is the belief that educators must genuinely get to know their clientele, and school systems must address both school and non-school issues.

A big problem with schools today is that too often they are not able to meet the basic needs of students. Jeannie Oakes, Presidential Professor, Graduate School of Education and Information Studies, UCLA, cites the lack of clean, safe and educationally appropriate facilities, which are fundamental to student learning, as one of the primary causes of academic inadequacy (Oakes, 2004). In several states there have been efforts to provide funding to address the facilities issue, which has resulted in new buildings for some of the nation’s poorest clientele. However, as current research suggests, unless deliberate efforts are undertaken by school staff to counter the negative effects of race and gender stereotypes, the social identities of students will determine their academic outcomes, regardless of the physical quality of the buildings (Rubin et al., 2006). For example, consciously promoting a democratic and tolerant climate within the school system, in which all students feel they are treated equally has been shown to combat negative, predisposed stereotypes (Flanagan, 2000). Structurally, the best way to develop this is from the ground up, through our teacher education programs, which all too often have been criticized for having a monocultural rather than multicultural perspective (King, Castnell, 2001).

Accordingly, much of what the literature suggests by way of structural and environmental changes emphasizes a transformation in the culture and climate of school systems. This is often hard to quantify, but statistics do reveal some trends in education, and we need to, at the very least, take a hard look at the way we do things. For example, the No Child Left Behind Law, while holistically intended to raise achievement levels for groups such as blacks, Hispanics, the poor, etc., is too punitive to schools that do not perform well on standardized assessments. A one-size-fits-all approach to closing the achievement gap is not productive. Moreover, schools that have established “color-blind” approaches that do not modify their strategies to account for cultural, racial and other differences, have more behavior problems and lower achievement rates.
Furthermore, it has been suggested that even rising test scores have not shown that students are actually learning more (Noguera, 2003). Even with the potential for electing our first female president, girls still name teacher, nurse, librarian and dancer as their top career choices (O-Reilly, 2003). Concomitantly, educational attainment still falls mainly along socioeconomic lines, despite examples to the contrary in some school districts. Likewise, the use of zero tolerance policies disproportionately punishes the neediest students by denying them the opportunity to learn, but they do not improve student behavior or the climate for learning (Ayers, Dohrn & Ayers 2001).

The preponderance of the research points toward debunking some long standing myths. I sought to expose those myths within the educational interventions that made up the backdrop of our study. First, we took Ogbu’s (2003) work on race and intelligence to highlight the notion that regardless of the cultural ethos a student brings to school, he or she can learn. That is to say, there are not certain cultural groups that place a higher or lower value on education or have a greater motivation to succeed. Second, we maintained that we cannot continue to place students in classrooms on the basis of standardized tests and expect to have any kind of cultural, social or racial heterogeneity (Banks, McGee Banks, 2004). Third, we brought to light Ron Ferguson’s work on racial disparities and highlighted the premise that we need to recognize that there are specific skill and knowledge deficit problems in particular cultural groups that schools should identify and respond to in what and how they teach students (Ferguson 2002). Ultimately, the message we wanted to send was that even with changes to structures, policies or programs, no initiative will improve achievement unless the beliefs, assumptions, knowledge and attitudes change in those individuals who work in academe (Mosely, 2006).

**Structure of the Research Design**

This action research study employed a quasi-experimental design to test the effect of educational interventions on faculty knowledge and attitude toward diversity and academic achievement. Two distinct interventions were tested in the research. The research was designed to compare the knowledge and attitude change of respondents depending on the type of intervention. Two experimental groups and a control group were administered a pre and post intervention survey. The “Exchange Group” was given the Diversity Survey to complete upon their arrival at a seminar on diversity and then again upon the completion of three other interventions related to
this project. Those interventions included participation in a seminar, two days collaborating with their counterparts, working with students, and participation in a final, culminating event, where they completed the Diversity Survey a second time. The “Workshop Group” was given the Diversity Survey to complete upon their arrival at a seminar on diversity and then again upon the completion of that seminar. The control group was administered the Diversity Survey at two faculty meetings (one month apart) with no intervention.

The population included in this study was public school teachers in New Jersey. The sample consisted of 83 participants who completed the Diversity Survey at two different times. The instrument used was created by Dr. Rossi. The instrument content was generated from the review of the literature on diversity. The instrument was validated by way of actual communication with scholars cited in the study reference section, or scholars who have authored similar studies connected to diversity and the achievement gap. Cronbach’s Alpha was used to test the instrument for reliability before and after the interventions (see results). The resultant Diversity Survey contains questions pertaining to school structures and environment, data pertaining to the achievement gap, and common myths about cultural diversity. Within that context, fourteen questions relate to teachers’ knowledge and six questions relate to teachers’ attitude toward diversity and the achievement gap.

The study sought to test the following hypotheses (where “T1” represents Trial 1, and “T2” represents Trial 2:

1. At T1, subjects with higher knowledge will demonstrate significantly more favorable attitudes.

2. At T2, subjects with higher knowledge will demonstrate significantly more favorable attitudes.

3. Between T1 and T2, those subjects afforded more intensive educational experiences will demonstrate significantly higher knowledge than those offered no education at all.

4. Between T1 and T2, those subjects afforded more intensive educational experiences will demonstrate significantly more favorable attitudes than those offered no education at all.
5. For the Workshop Group, knowledge will increase more moderately from T1 to T2 than the Exchange Group, but greater than the Control Group.

6. For the Control Group, knowledge will not significantly increase from T1 to T2 and there will not be a significant change in attitude.

**Results**

To determine level of knowledge on the fourteen knowledge questions, participant responses were given a numerical value. A five-response Likert scale was used to guide data entry. Responses to knowledge were coded on a five point scale, from 5 = most knowledgeable, 4 = knowledgeable, 3 = uncertain, 2 = less knowledgeable, 1 = not knowledgeable. Accordingly, the six attitude questions were coded on a five point scale from 5 = most favorable, 4 = favorable, 3 = uncertain, 2 = less favorable, 1 = not favorable. As stated, the validity of the instrument was confirmed by the research, and through conversation with authors who have published in the field of diversity studies. The reliability of the instrument was determined by using a Cronbach’s Alpha. The results of the Cronbach’s Alpha were as follows:

Reliability prior to the interventions: .858

Reliability after to the interventions: .946

To test hypotheses 1 and 2 a Pearson Correlation Coefficient was used. Those two hypotheses were that subjects with higher knowledge will demonstrate significantly more favorable attitudes, both before and after the interventions. The results of the pre survey suggest that as knowledge increases so does attitude and the results were a correlation of .692. After the interventions, the results of the post survey suggest that as knowledge increases so does attitude and the results were a correlation of .891. (See Figure 1.) Thus, the results of the first two hypotheses were confirmed and were statistically significant.

To test hypothesis 3, a T-Test was used. This hypothesis stated that subjects afforded more intensive educational experiences will demonstrate significantly higher knowledge than those offered no education at all. The results of the pre and post survey knowledge questions suggest
that the Workshop and Exchange Groups increased their knowledge significantly while the Control Group did not (see Figure 2). To test hypothesis 4, a T-Test was used, and this hypothesis stated that subjects afforded more intensive educational experiences will demonstrate significantly more favorable attitudes than those offered no education at all. The results of the pre and post survey attitude questions suggest that the Exchange Group increased their knowledge significantly while the Workshop and Control Groups did not (see Figure 3).

Hypotheses 5 and 6 accordingly used the T-Test results, which suggest that for the Workshop Group, knowledge did increase more moderately from T1 to T2 than the Exchange Group but greater than the Control Group (see figure 4). For the Control Group, knowledge did not significantly increase from T1 to T2 nor was there a change in attitude (see Figure 3).

**Figure 1**

Correlation – all 83 participants

Total pre knowledge is correlated with total pre attitude: .692*

Total post knowledge is correlated with total post attitude: .891*

* Significant

**Figure 2**

Knowledge Questions Pre Survey/Post Survey

Control Group 31.93/29.57

Workshop Group 45.52/50.14*

Exchange Group 37.52/64.52*

* Significant @ p < .001
**Figure 3**

Attitude Questions Pre Survey/Post Survey

Control Group 16.03/14.77

Workshop Group 22.14/22.45

Exchange Group 19.00/27.88*

* Significant @ p < .001

**Figure 4**

Total Questions Pre Survey/Post Survey

Control Group 47.97/46.53

Workshop Group 67.60/76.17*

Exchange Group 56.52/97.30*

* Significant @ p < .001

**Discussion**

This action research study targeted three distinct goals. The first was to increase teacher knowledge and improve teacher attitude regarding diversity and student achievement. The project was designed to establish these improvements through the use of educational interventions and to measure them statistically by way of a pre and post survey. The second goal was to provide students and teachers with opportunities to discover similarities and embrace differences between two diverse settings. This second objective was accomplished through the educational interventions. A third goal was to brainstorm possibilities to expand and sustain the project, and move toward an overall diversity initiative in our district. We feel we were able to accomplish all three objectives.
As presented, the first goal (to heighten knowledge and attitude), was achieved through the analysis of pre and post survey results. The second goal was accomplished after examination of teacher and student artifacts that became part of the project. Through funding provided by the Dodge grant all student participants (twenty-four in total, twelve from each school, all middle school age) were given cameras and journals to create a living documentary of their experience. As the project unfolded it became clear that this was a tremendously valuable experience for both adult and student. Evidence of that notion came from a variety of sources. Student journals reveal that they entered the experience with a good deal of uncertainty and trepidation, which, to a person, changed in a very positive sense by the end of the project. For the Lopatcong students, many had never been to Newark; for the Avon students many had rarely been out of Newark.

As the first day approached, student comments such as “I just always thought Newark was a bad place with bad people,” and “I never thought I would even like the people from Lopatcong,” and similar sentiments were reflected in the journals. However, by the end of the first day together, students had exchanged emails and were hugging when it was time to leave. The final two gatherings resembled more of a reunion of long lost friends than anything else. At the third session, each student created a coat of arms that highlighted what they gained from the experience and how they will carry the lessons from it into high school and beyond. This session was videotaped, and what an incredible, lasting image the students made when speaking in front of fifty people, including both their peers and teaching staff from both schools! At the final experience, all adults (teachers, administrators, board members) provided a statement about the value of the diversity project. Each expressed a renewed interest in infusing diversity into their teaching. The videotape also solidified that we had accomplished our second goal with the adults as well. To further affirm the efficacy of the program, our project has been replicated by other school districts in the state, who took our model and tailored it to their own preferences. The nicest compliment we received in that regard was being invited to participate in the 2008 Great Meadows Tolerance and Diversity initiative with Paterson Public Schools.

With the first two goals of the project being met, our focus was then to create a sustaining diversity initiative in our district, our third goal. The springboard for that came in the way of another grant, this one from Commerce Bank. The success of The Diversity Project attracted a lot of attention and as such, there were several very nice newspaper articles written about it. Reading about The Diversity Project, executives from Commerce Bank contacted us about
possibly funding a project. I met with representatives from the bank and crafted a proposal that would target diversity through an artist in residence program. Using the money from Commerce Bank, along with funding from our board of education, we were able to bring in two artists from Rome, Italy, to work for two weeks with our middle school students. Dubbed the Dinner Party Conversation, students created historical figures out of paper mache, who were engaged in a dialog about life. Seated at the table, Mother Teresa spoke with Rosa Parks about a life dedicated to sacrificing for others, while Sitting Bull and Florence Nightingale exchanged their beliefs about doing what is right. King Tut, Ella Fitzgerald, Salvador Dali and Yao Ming rounded out the conversation, which was researched, created and recorded by middle school students. It was a wonderful expression of diversity throughout the ages and a fantastic conclusion to a year filled with diverse experiences.

The Diversity Project continued to gain notoriety, and was accepted as a group session at the New Jersey School Boards Convention in October 2007. From that session we were able to make connections with other New Jersey school districts and have woven diversity components into our character education curriculum and cultural enrichment programs. Our artist in residence experience will return to our district, this year at the elementary school. We believe our teaching staff has a deeper understanding of the many facets that impact student learning. The requests for professional development, including workshops, seminars and graduate courses, now reflect a desire to attain enhanced knowledge about diversity studies.

The beauty of diversity is that it provides great flexibility in how you can approach it. Diversity, as a subject area, has become part of the culture, climate and curricula of our school district. Moreover, there is widespread support for diversity projects because they connect with all facets of education and society. Also, grant funding support continues from all the major and smaller grantors. The Lopatcong Diversity Project was at the same time a once in a lifetime experience that will provide perennial opportunities for all educational stakeholders.
Works Cited


About the Author

Michael A. Rossi, Jr., Ph.D., has spent his entire professional career in education. Dr. Rossi has taught elementary, middle and high school; additionally, he was a full-time Professor of Education at the college and graduate school levels. Dr. Rossi has led several educational seminars, successfully written competitive grants, and published action research studies. Rossi has his bachelor’s degree from Moravian College; a master’s from Tufts University, a master’s from Montclair University, and his doctorate from Seton Hall University. He has supervised hundreds of public school teachers as a Curriculum Director, Principal, and now as Superintendent of Lopatcong Township in Warren County, New Jersey. He lives in Independence, New Jersey with his wife and three children.