Florida Journal of Educational Research
Fall 1993, Vol. 33, No. 1, Pp. 40-47.

Perceptual Differences among Principals Toward a Magnet Middle School and its Thematic Curriculum

G. Michael Barry
L. Carolyn Pearson
Patricia J. Wentz
University of West Florida

ABSTRACT. The purpose of this study was to examine the attitudes of a magnet school principal and other school district middle school principals toward the magnet school and the infusion of technology into its thematic curriculum. The participants in this study consisted of a magnet school principal and the remaining nine middle school principals from a large, urban, northwest Florida school district. The data were gathered using two instruments developed for use in the study, an open-ended survey and a 32-item attitudinal measure. The results from both instruments indicated that the middle school principals held quite different (and more negative) perceptions toward the magnet school than the magnet school principal. There was agreement, however, on the potential of technology in the schools and the use of a thematic curriculum.

Middle-level education has made much progress in the past thirty years, particularly concerning the characteristics of the early adolescent and school climate. Although middle-level schools have undergone restructuring, many efforts have replicated what already exists, including interdisciplinary teams, advisory programs, student activities, and block scheduling. Many changes have been tried with varying degrees of success. Questions have arisen concerning the content of the curriculum of middle-level education (Brazee, 1989; Lipsitz, 1984). One setting in which middle-level curriculum seems to be changing is magnet schools.

A middle-level magnet school was developed in northwest Florida as a way of attracting students from all ethnic and racial groups to a high-quality educational

program. This magnet school differs from most middle-level schools in that it infuses technology into a thematic curriculum. These two features, technology and thematic curriculum, may foster unhealthy competition with other middle schools in a time of scarce resources; however, magnet schools may well serve as the model for revising middle-level curriculum. Many magnet schools receive supplementary funding that allows for such changes as new technology and curriculum; therefore, these schools may have a potentially negative impact on other middle schools.

If change is to occur in a school, such change often begins with the principal. The purpose of this study was to examine the attitudes of a magnet school principal and other district middle school principals toward the magnet school and the infusion of technology into its thematic curriculum.

Perspective

Magnet Schools

Although magnet schools were initially designed to develop patterns of voluntary integration, they have also developed into centers whose administration and faculties are willing to innovate with promising programs for educating children and youth. The need for such innovations has been stressed by many leaders in education. Thomas A. Shannon, Executive Director of the National School Boards Association (1992), has referred to former President George Bush's analogy of needed educational improvements to four trains on parallel tracks. The first three trains relate to "improving today's schools, inventing 'new schools' for the 21st Century, and supporting lifelong learning." The fourth parallel train has to do with communities being committed to learning in preparation for their schools' success.

Because of the nature of magnet schools and their potential, the magnet school could easily embrace all four of George Bush's strategies for improvement in education in addition to the initial purpose of the magnet school assisting voluntary school integration. According to an Associated Press news release (*Pensacola News Journal*, 1992), U. S. Education Secretary Lamar Alexander has cited the need for this nation to "give its schools more independence to educate children creatively." Speaking to the American Association of State Colleges and Universities, Alexander pointed out that "the United States already spends more on education per pupil than any country except Switzerland." Alexander indicated a need for schools "that are open 16 or 18 hours a day every day of the year with a fantastic menu of educational offerings."

Educational innovations vary from state to state and even within school districts. Many of these innovations appear to hold some promise for the improvement of education. Across the country, schools have been developed under the label *magnet* schools (Bolanos, 1990; Bolick, 1990; Demoze, 1987; New York State Department of Education, 1985; Rozell, 1985; Stover & Trotter, 1991; Tonegawa, 1991; United States Office of Educational Research and Improvement, 1988). These schools are designed primarily to induce voluntary integration by offering specialized curricula. Magnet schools offer interested students from across a larger geographic area more intense, serious study in specific areas of inquiry or in non-traditional methods of pursuing the traditional curriculum (e.g., thematic curriculum).

In the first-year evaluation of the San Diego High School International Baccalaureate Writing Academy Magnet Program (Demoze, 1987), the author cited administrative recommendations related primarily to funding, remedying absences and tardies, and working toward an integration of unbalanced classrooms. The United States Office of Educational Research and Improvement research reflects the importance of strong leadership for a magnet school to be successful (1988). However, little research has been completed regarding the perceptions of school principals. One of the most comprehensive research activities related to magnet schools was the *New York State Magnet School Research Study* completed by the New York State Department of Education (1985). According to this report, principals agreed that the "most important goals of magnet education . . . were to provide educational choices to parents and students, and to improve students' basic skills." It was observed that parents and teachers understood and accepted the same goals. It was further found that teacher turnover rate in the magnet schools was very low, that 80% of the teachers indicated their magnet school was superior to non-magnet programs, and that 90% perceived that magnet schools were successful in meeting the needs of the students for whom they were intended.

Infusion of Technology into a Thematic Curriculum

Beane (1990) defines a middle school curriculum as one that should include three dimensions: (1) themes that emerge from an intersection of personal and social concerns, (2) skills necessary to explore these themes, and (3) the concepts of democracy, human dignity, and cultural diversity. A thematic unit provides a broad area of study bound by a central idea or concern with which a student may strongly identify. Within the thematic unit, opportunities are provided that develop and apply not only traditional skills (e.g., reflective thinking, problem solving, social interaction skills), but also skills that are rarely taught (e.g., valuing, critical ethics, searching for completeness and meaning). Concepts such as democracy, human dignity, and cultural diversity pervade the content of the thematic units.

Technology is to be viewed as an implicit part of the curriculum (Barr, 1993). Computers and their peripheral hardware are not to be viewed as the means to complete assignments or as rewards, but for their vast utility and continuous access to information. Regardless of thematic unit content, students utilize a broad technological and multimedia approach to skills acquisition. In addition to learning common applications such as word processing, students further their skills acquisition by using telecommunication and database tools, and multimedia tools (e.g., laserdisk, video editing, graphics).

Method

Subjects and Procedures

The participants in the study consisted of the entire district middle school principal population: one from the magnet school and the remaining from the other nine middle schools in a large, urban, northwest Florida school district. The principal of the magnet school was female, and the other principals consisted of two females and seven males. All of the principals had four or more years of administrative experience.

The data were gathered using two instruments developed for use in the study. One was an open-ended survey administered to the principals by graduate students in the Department of Educational Leadership at the University of West Florida who were trained to conduct the interviews in a clear and consistent manner. With the exception of the principal from the magnet school, confidentiality was maintained by placing the surveys in sealed envelopes without names. The surveys were then delivered to one of the authors for analysis. The other instrument consisted of a 32-item attitudinal measure that was mailed to all 10 principals.

Instrumentation

The open-ended survey consisted of six questions that inquired about a general description of the magnet school, its effect on the other middle schools in the district, differences related to technology and curriculum, perceived outcomes of the magnet school effort, perceptions of how middle school students should be taught, and perceptions of how technology would improve middle schools. The 32-item attitudinal measure was similar to magnet school attitudinal instruments created by the Purdue Research Corporation. The instrument utilized a five-point Likert scale containing both positively and negatively stated questions concerning attitudes toward magnet schools and technology. The subjects responded using a scale ranging from 5 (strongly agree) to 1 (strongly disagree). Negatively stated items were recoded to reflect high scores on the attribute. The reliability of the magnet

school attitudinal measure for the principals was estimated using the Cronbach alpha internal consistency reliability coefficient.

Results

Survey

The survey data were summarized separately for the magnet school principal and the remaining nine principals. When asked for a general description of the magnet school, the magnet school principal was very graphic in stating that the school was a place for able learners to be exposed to innovative ideas in curriculum delivery. The magnet school principal also described the school as a positive, energetic, enthusiastic, intelligent, and caring place. The other principals held quite different perceptions. Overwhelmingly, their comments were limited to identifying the school as an elitist environment for the able learner.

When asked about the effect of the magnet school on the other nine middle schools in the district, the magnet school principal indicated that an impact on curriculum and instructional delivery throughout the district would occur due to the school serving as a role model. Only three other principals held this perception, with the others indicating that the magnet school only pulled top students out of their neighboring communities and made no impact on current practices.

When asked what was different about the magnet school's technology and curriculum, the magnet school principal perceived that the curriculum was "different and more sophisticated," and that hands-on experiences were allowing for a "world-view." The other principals agreed only with the hands-on comment and held the perception that the magnet school had "computers for everyone" because it had the money needed to buy the necessary equipment. As for the curriculum, all agreed that the magnet school was providing an interdisciplinary curriculum that crossed grade-level and subject boundaries and allowed for student self-evaluation. The curriculum was also perceived as student interest-based with teachers actively defining/writing it. Only one principal indicated that similar activities were occurring in his/her school.

The magnet school principal indicated that the model would replicate in middle schools elsewhere and that principals should be urged to "break with tradition." The other principals saw the outcomes of the magnet school effort more broadly. They indicated that the magnet school would force higher standards to be set in their own schools and that knowledge acquisition on the part of the student would improve. Two principals reported that the magnet school would "get more

attention," would bring business to the area, and might hurt overall county efforts to support all schools.

Perceptions of how middle school students should be taught were similar. Both the magnet school principal and the other middle school principals indicated that students should be allowed creativity and flexibility in their learning, with many hands-on activities that would allow for different learning styles. Both groups also agreed that what is learned should be meaningful/relevant and should help students get along with each other.

Perceptions of how technology would improve middle schools was also similar. All indicated that technology would move the middle schools into the next century, would encourage children to learn, would network the schools by easing data transfer and access, and would ensure student success.

Magnet School Attitudinal Measure

The magnet school attitudinal instrument had high internal consistency, with a coefficient of .93 for the administrators. The score for the magnet school principal was 146; the mean score for the other principals was 116 (SD = 12.6). The magnet school principal held a very favorable attitude toward the magnet school and its technology; however, the other middle school principals were less favorable.

Conclusions

As previously stated (New York State Department of Education, 1985), there is a lack of research examining the perceptions of school principals toward magnet schools. This study was an initial attempt to explore this area of principal perceptions. The results of the open-ended survey indicated that the middle school principals held quite different (and more negative) perceptions toward the magnet school than the magnet school principal. Although principals from the New York study indicated a need for magnet schools to provide educational choices to parents and students and to improve students' basic skills, this study seems to provide some information to the contrary. Often the principals perceived the magnet school as being a place that had a wealth of technology and as a place that "pulled the top students." Agreement seemed to appear only when such areas as middle school pedagogy and the impact of technology was addressed. Information on the attitudes of administrators from magnet and non-magnet schools toward magnet schools and technology may serve as a source for developing case studies that would be useful in training future principals.

The competition between middle schools for scarce resources seems to be reflected in the data from this study. Agreement by the principals on the potential of technology and the positive interest expressed in thematic curriculum seems to be a non-threatening starting point for magnet schools to share what they have learned with their colleagues in other middle schools.

References

Associated Press. (1992, June 16). Alexander seeks creative schools. *Pensacola News Journal*.

Barr, C. (1993). *School of excellence curriculum proposal — Brown Barge Middle School*. Unpublished manuscript.

Beane, J. A. (1990). *A middle school curriculum: From rhetoric to reality*. Columbus, OH: National Middle School Association, Baesman Printing Corporation.

Bolanos, P. J. (1990). Restructuring the curriculum. *Principal, 69*(3), 13-14.

Bolick, C. (1990, March). *A primer on choice in education: Part I — How choice works*. Washington, D.C.: Heritage Foundation.

Brazee, E. (1989). The tip of the iceberg or the edge of the glacier: Curriculum development in middle schools. *Mainely Middle 1*, Spring, 18-22.

Demoze, F. (1987). *San Diego High School International Baccalaureate Writing Academy Magnet Program First Year Evaluation*. San Diego: San Diego City Schools.

Lipsitz, J. (1984). *Successful schools for young adolescents*. East Brunswick, NJ: Transaction.

New York State Education Department. (1985, January). *New York State Magnet School Research Study. Final Report*. Albany: New York State Education Department.

Rossell, C. (1985). What is attractive about magnet schools? *Urban Education, 20*(1), 7-22.

Shannon, T. A. (1992). Here's one train schools won't want to miss. *The American School Board Journal, 179*(4), 50-52.

Stover, D., & Trotter, A. (1991). Principals ponder choice and more at national conventions. *The Executive Educator*, 30-31.

Tonegawa, K. (1991). In Japan: Quest for individuality and flexibility. *The School Administrator, 48*(6), 27-29.

United States Office of Educational Research and Improvement (ED). (1988, September). Ten steps to a successful magnet program. *Research in Brief.* Washington, D.C.: Author.

G. Michael Barry, Educational Leadership, University of West Florida, 11000 University Parkway, Pensacola, FL 32514